

The Kearns Glass Companies of Zanesville

Bill Lockhart, Pete Schulz, Beau Schriever, Bill Lindsey, and Carol Serr

with contributions by Bill Barrett and David Whitten

Virtually all the typical secondary sources we use for glass factories that began in the mid-19th century were confused about the series of companies connected with George Washington Kearns – a clear indication of the complex history of the Zanesville factories. Zanesville glass was the focus of pioneering work by Knittle (1924; 1927; 1932), but her chronological assessments of the Kearns factories were incomplete and evidently led to further misinterpretations by McKearin and McKearin (1948) and Toulouse (1971). Many of these errors were corrected by subsequent detailed research in Zanesville newspapers and county records by Schneider and Greer (1956a-h). Their work is an impressive compilation of historical information on Zanesville glass factories.

Nonetheless, their history, being segregated into numerous individual newspaper articles, is often difficult to follow, and it suffers from some conflicting statements as well as from gaps in the historical record. These articles are the basis for the account of the Kearns factories in McKearin and Wilson (1978:165-168), who nonetheless managed to confuse some aspects of the history. Fortunately, Barrett (1997), another member of the local glass industry, after 20 years investigating its history, locating many previously unknown newspaper references and other archival sources, produced an impressively comprehensive book on Zanesville glass and followed that with an even more impressive volume (Barrett 2011). Barrett's 2011 book is the basis of most of our understanding of the Zanesville industry, supplemented with some additional research of our own.

Histories

George Kearns and his associates were involved in a number of glass factories and operating companies, almost all located at Zanesville. With the exception of the split when George Kearns left the plant he had been instrumental in founding, the Kearns companies formed a long-lasting series.

Burns, Reynolds & Co., Zanesville, Ohio (1842-1848)

In 1842, George Kearns arrived in Zanesville from Pittsburgh with five other experienced glass workers (Joseph Burns, W.F. Spence, Thomas Reynolds, George Wendt and Samuel Turner). Investing \$500 apiece, they purchased the operating rights to the old White Glass Works, a tableware factory that had been established as the Zanesville Glass Mfg. Co. by several local businessmen in 1815. The factory does not seem to have begun operation until mid-1844, the firm being known as Burns, Reynolds & Co. In late 1844, two of the original partners sold their interests, followed by another pair two years later. The final two original partners, Burns and Kearns, sold out in 1848. Barrett found no record of any marked containers produced by the group (Barrett 1997:36-38; 2011:65-66).

The company in the final years was occasionally referred to by investigators as Burns & Kearns, which is likely if they were the only two remaining partners, even though no contemporary source has been found for such a name. The departing partners each sold their shares to Arnold Lippitt in 1848, a local businessman who owned the Slago Glass Works another local glass factory that produced tableware,. Lippitt called the factory the Zanesville Glass Works, although that name may have been used earlier. He operated the firm until about 1851 (Barrett 2011:66-67)

Burns, Kearns & Co., Zanesville, Ohio (1849-1852)

In 1849, George W. Kearns and Joseph Burns began construction of a bottle glass factory at Putnam, across the Muskingum River from Zanesville (Barrett 1997:36-39; McKearin & Wilson 1978:165).¹ The first indication that the plant was in operation is an advertisement in April 1851. At that time, “Burns, Kearnes (*sic*) & Co.” announced, under the heading “Putnam Glass Works” that they had “just completed their extensive Glass Works, and are now manufacturing all sizes of Bottles, Jars, Vials, and other Ware” with their showroom on Main Street in Zanesville (quoted in Barrett 1997:65-66; the same ad was published for more than one year: see *Zanesville Courier* 1852a). In the fall of 1852, the works were reported to be “in full operation” and their showroom on Main Street was advertised in the local paper until May,

¹ The town of Putnam became a part of Zanesville in 1872 (Barrett 1997:70).

1853. The works failed shortly thereafter, and the courts assigned Alfred Merrick as trustee for liquidation, although those duties quickly passed to A.A. Guthrie on June 10, 1853 (*Zanesville Courier* 1852b; 1853; Barrett 1997:67; 2011:93-97).

The plant was idle for several years, until Hudson C. Ward purchased the property on March 19, 1856, for \$949. Cornelius Woodruff bought the plant three days later on March 22 for \$1,130 to be operated by his son-in-law, Jehu W. Carter, a former glass blower at the plant.² J.W. Carter & Co. (with partner Jacob Stimely) entered production ca. 1858. Carter dissolved the partnership in early 1861. By 1864, however, James C. Gillespie became Carter's new partner. Woodruff had remained a silent partner; however, Susan Woodruff sold her deceased husband's share to Carter & Gillespie for \$2,080 upon her husband's death in late 1864 (Barrett 1997:67-84; 2011:97-100).

Carter and Gillespie broke up in 1868 and soon made a decision that would change the course of the glass house. He formed an agreement with Joel Haines, an Ohio inventor, to become the exclusive manufacturer of the Haines patented fruit jar (see the Containers and Marks section below) and probably began production of the jars by 1872 – the year that Zanesville annexed the Village of Putnam into the city. Carter updated the factory, including rebuilding the furnace in November 1873. All went well until 1876, when the market for fruit jars changed with the introduction of other types of jar seals, and the Putnam Glass Works began a steady decline in production (Barrett 2011:97-103).

Carter leased the factory to his two sons, Charles and John, in June 1877, but the operation had failed completely by January of 1878. When the property went up for auction on April 11, 1878, the First National Bank of Zanesville acquired the glass house for \$3,960. The bank was unable to find a buyer, until John D. Bailey purchased the property on February 28, 1880, but Bailey was unable to amass the subscribers he needed to begin operations and had the plant demolished on August 15, 1881 (Barrett 2011:113-114).

² There is some contention about Carter's first name. According to Barrett (1997:69; 2011:97), Jehu is the correct name. His father and son were both named John Carter, and that may have caused the confusion.

Containers and Marks

When Jehu W. Carter formed an agreement with Joel Haines ca. 1871, he began making the only glass items that may be directly attributed to the Putnam Glass Works. Although the plant made “Druggists’ Ware, Bottles, Flasks, Fruit Jars, Hock Wine and Brandy Bottles” according to an 1870 billhead, none were marked by any logo or initials (Barrett 2011:117). Several jars of the Haines style were embossed with the Putnam Glass Works name – with and without the patent dates. Other jars only bore the Haines patent dates.

P or Circle-P

Barrett (2011:117) stated that he had received

inquiries and [had] seen bottles marked with a simple P as well as a P surrounded by a circle, which from appearances of age, have a possibility of a Putnam Glass Works origin simply from the fact that I know of no other factory which would have used such a mark during the period of their operation.

Although Barrett made no mention of other possibilities, the Pierce Glass Co. used a Circle-P logo, embossed on the bases of medicinal bottles. Pierce was in business from 1905 to 1987, and Toulouse (1971:412) claimed that the firm used a “P” mark on its bottles. However, we have never seen an example of a “P” alone. Since Pierce specialized in mass-produced bottles, it is unlikely that we would have missed an example. Pierce installed machines in 1917, and all of the Circle-P logos we have seen were on machine-made containers. With their later characteristics, even the mouth-blown bottles are probably *not* the bottles Barrett discussed. For more information, see the section on Pierce Glass Co.

PATD AUG 13 1867 (ca. 1867-1868)

Creswick (1987a-75) illustrated and discussed a can embossed “PATD AUG 13 1867 / BY JOEL HAINES / WEST MIDDLEBURG. O.” on the front (Figure 1). She attributed the patent to Joel Haines (see next entry). None of the other sources discussed the cans, but they were probably made by a local tinsmith for Haines in 1867 or 1868 – although production may

have continued. Creswick (1987a:75) also noted a glass jar with the same embossing, although she claimed this was in a circular format. She stated that “one jar [was] presently known, an aqua quart reported by collector Al Vigon of Ohio.” This was also probably commissioned by Haines and made by a local but currently unknown glass house ca. 1867 or 1868. Barrett (2011:118) included a photo of one of these jars. Roller (2011:225) briefly mentioned the jar and embossing.

JOEL HAINES (ca. 1867-1868)



Figure 2 – Joel Haines jar (North American Glass)

Roller (1983:145) discussed these jars embossed “JOEL HAINES WEST MIDDLEBURG OHIO” on the front (Figure 2). He described the closure as “metal lid sealed with wax on bottom ledge in jar mouth, wooden bar held in place under top edge of jar finish tightened against two ramps on top of lid, jar lip and upper finish ledge interrupted on opposite sides to allow for entry of bar” and illustrated the format (Figure 3).

Roller (1983:145; 2011:225) added that “these are probably the earliest of the family of Haines’ fruit jars. The closure description was taken from a jar found with fruit inside and the original seal intact.

Haines was issued a patent on August 13, 1867, for a

metal fruit can that showed a similar type of closure.” Haines received Patent No. 67,754 for an “Improvement in Fruit Cans” on that date (Figure 4). The “N” in “HAINES” was reversed.

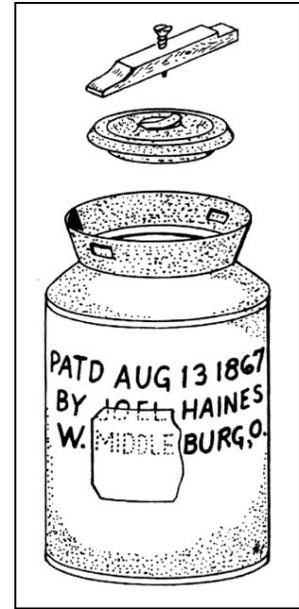


Figure 1 – Haines can (Creswick 1987a-75)



Figure 3 – Haines closure (Roller 1983:145)

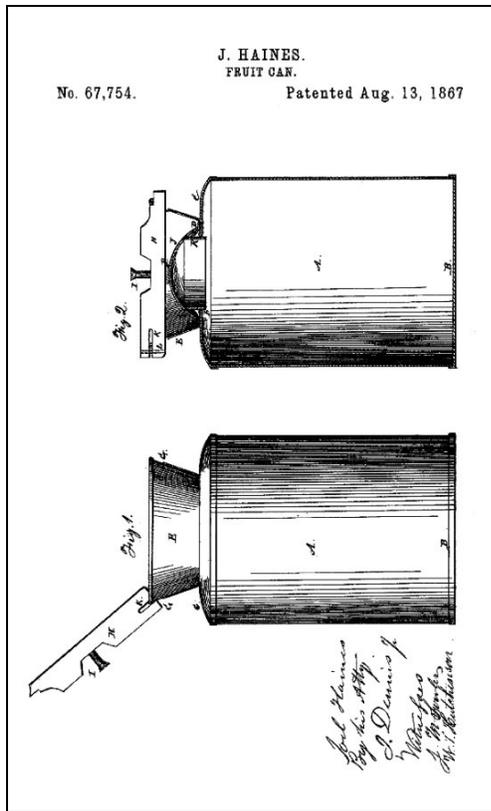


Figure 4 – Haines 1867 patent

Creswick (1987a:75) illustrated the jar but only added that “4 whole jars and 3 damaged jars [were] presently known” (Figure 5). Barrett (2011:118) included a photo of the jar with the same unusual finish illustrated by Creswick. He noted that the finish “probably proved to be susceptible to breakage and therefore unmarketable.” Only one other complete example “is known” plus a “damaged specimen ” As noted above, both of these early jars were probably commissioned by Haines, and Carter probably received or viewed one of them when he adopted the jars as his flagship brand.

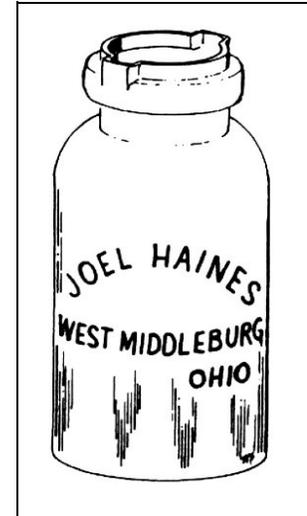


Figure 5 – Joel Haines jar (Creswick 1987a:75)

HAINES PATENT (ca. 1872-1875)

Toulouse (1969:139-140) described these jars as being embossed “HAINES (arch) / PATENT / MARCH 1ST / 1870 (all horizontal)” on the front (Figure 6). He noted that Joel Haines of West Middleburg, Ohio, received Patent No. 100,396 on March 1, 1870 (Figure 7). Toulouse stated that the patent document described the closure as “a metal lid, formed with two spiral ramps on the edges, a sharp edge intended to cut into the rubber gasket, and a wire clip. Every lid so far seen has been made of glass, and held by a flat metal clip rather than by wire.” Jars in our sample have all been glass, but the clamps have all been wire. The actual patent document stated that

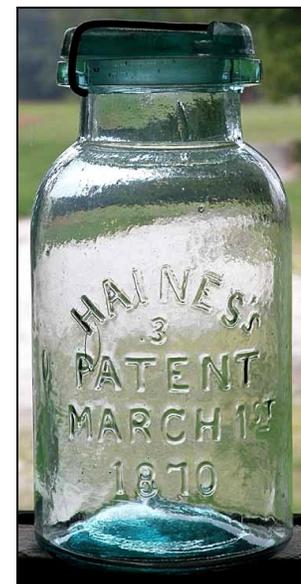


Figure 6 – Haines Patent jar (North American Glass)

the top surface is creased or corrugated so as to make circular ridges or depressions, or both, upon it, in order that the more prominent parts may be pressed into the yielding surface of the packing or gasket placed upon it, and thus form an air-tight joint beneath the packing with less pressure than would otherwise be required. For the same purpose a single edge of the tin (or other sheet metal) cover is made to project downward so as to meet the top surface of the gasket or packing, and this edge being easily pressed into the said packing an air-tight joint is thus formed above the packing by a very light pressure on the lid or cover.

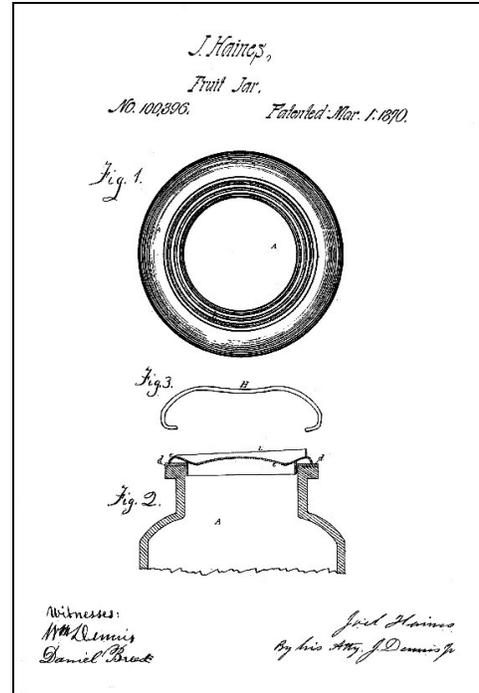


Figure 7 – Haines 1870 patent

Thus, the top of the finish was flat and grooved (Figure 8).

Roller (1983:146; 2011:227) very briefly discussed these jars, noting that a variation had a “3” between “HAINES” and “PATENT.” The later revision included numbers 1, 2, and 4. He noted that the lid was embossed

“PATENTED MACH 1ST 1870” in a circle (Figure 9).



Figure 9 – Patented lid (North American Glass)

Creswick (1987a:46)

illustrated the jar, lid, and clamp and noted a variation with the second “s” reversed (Figure 10). She added that the jar could have a “2” or “3” below “HAINES,” and the “2” was reversed on some jars. Barrett (2011:101) suggested that the production of these jars did not begin until late 1872. Production probably halted no later than July 1875. Carter’s ad and trademark application only illustrated the Haines Improved jars.



Figure 8 – Flat Grooved finish (North American Glass)

Photos of jars from North American Glass show all four numbers, but the only “2” was reversed. None had the “s” reversed, and all were embossed “HAINSE’s” Although some jars had later lids that had been added by collectors or users, the correct lids (see above) appeared on most jars. If the Northern American Glass sample was representative, the Hainse’s Patented jar was by far the most common, even though it was made earlier. This is consistent with the likely production dates of 1872-1875.

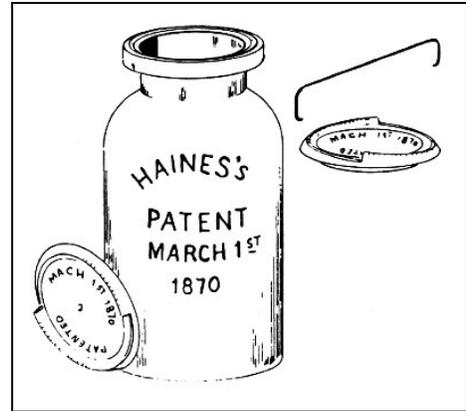


Figure 10 – Haines Patent jar (Creswick 1987a:46)

HAINES’s IMPROVED (1875-1877)



Figure 11 – Haines Improved jar (North American Glass)

Toulouse (1969:140) only noted that this jar was “reported but not verified.” He added that the name was sometimes “spelled with an apostrophe and final ‘S’” – although he ascribed the Haines Patent jar rather than the Improved.



Figure 12 – Haines Improved lid (North American Glass)

Roller (1983:146; 2011:226) noted that the jar was embossed “HAINES’s

(arch) /
IMPROVED
/ MARCH
1ST / 1870

(horizontal)
” on the side

and “PATENTED MACH 1ST 1870” on the lid (Figures 11 & 12). He added that the patent “called for circular ridges into the jar sealing surface, meant to press into the sealing gasket and form a more



Figure 13 – Carter 1876 trademark (Roller 1983:146)

airtight joint. These ridges are found on these jars as well as on [the other Haines jars].” Roller also included information on J.W. Carter’s January 25, 1876, very complex trademark (No. 3,374) for the Haines Improved Patent Fruit Jars (Figure 13). Roller (1983:146) also discussed a half-pint variation that was only embossed “HAINES’s (arch) / IMPROVED (horizontal)” – probably due to the lack of space.

Creswick (1987a:76) illustrated three variations of this jar. One had “HAINES” (note apostrophe but no “s”) above a “1” or “3”; another was embossed “HAINSE’s” with no number; and the final one was the half-pint jar with abbreviated embossing (Figure 14). Barrett (2011:118) called the half-pint example probably a salesman’s sample” and only knew of one other, glued together from fragments.

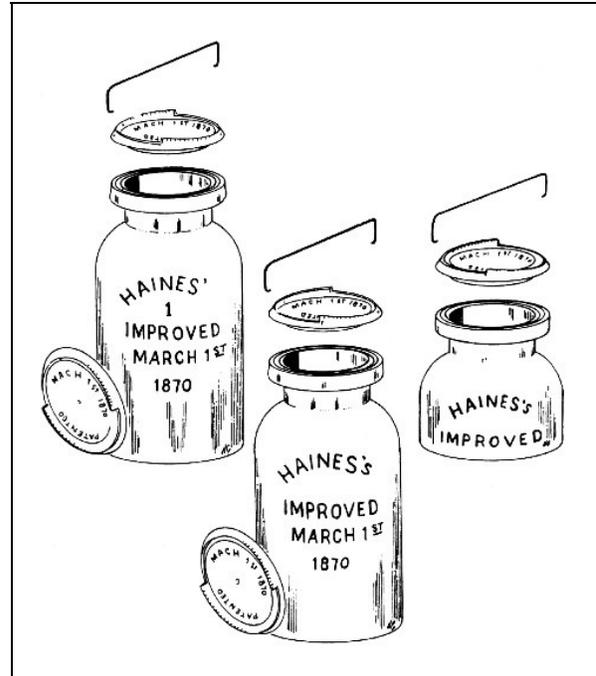


Figure 14 – Haines Improved jars (Creswick 1987a:46)

The photos from North American Glass showed an interesting dichotomy in the Haines’s Improved jars. Three photos showed numbers under the word “HAINES” – and all of them ended with the apostrophe but no “s.” The five examples with no numbers all had the apostrophe “s” at the end of the word. The jars used the same lid as the earlier one.

HAINES’s IMPROVED “NE PLUS ULTRA” (1875-1877)

Roller (1983:146; 2011:226) discussed these jars embossed “HAINSE’s / IMPROVED / NE PLUS ULTRA / PATD APRIL 21ST 1868 MCH 1TH 1870 NOV 2^D 1875” on the side and “PUTNAM GLASS WORKS (arch) / ZANESVILLE, OHIO (inverted arch)” on the base (Figure 15). The lid was more correctly embossed “PATD APRIL 21ST 68 MCH 1ST 70 NOV 2^D 75” (Figure 16). He noted Alexander J.H. Hilton, Joel Haines, and Charles R. Carter as the patentees. Ne plus ultra is Latin, meaning the most extreme example or the ultimate.



Figure 15 – Haines Ne Ultra Plus (North American Glass)

Creswick (1987a:76) illustrated two variations of this jar, one with “1TH” – the other with “1ST” (Figure 17). She also detailed the patent history.

Alexander J.H. Hilton, of Boston, Massachusetts, received Patent No. 76,915 on April 21, 1868 (Figure 18)

The Hilton patent looked *very* similar to the Haines 1870 patent.

The major distinction was that a flat clamp secured the closure rather than a wire. We discussed the 1870 Haines patent above, and Charles R. Carter (Jehu’s son) received

Patent No. 169,340 on November 2, 1875. The main

improvement in the Carter patent was a series of grooves on the flat base of an annular recess (grooved ring – as in grooved-ring wax sealers) and matching grooves in the flat-topped lid (Figures 19; also see Figure 8).

It seems very likely that Carter secured the rights to the Hilton patent to avoid any possible infringement suits. Because the 1875 patent date was embossed on the jar, these could not have been made prior to that date. However, a large number of Ne Plus jars must have been made between 1875 and 1877. It is *very* interesting that the Ne Plus jars cited this patent but *did not* have the



Figure 16 – Haines Ne Ultra Plus lid (North American Glass)

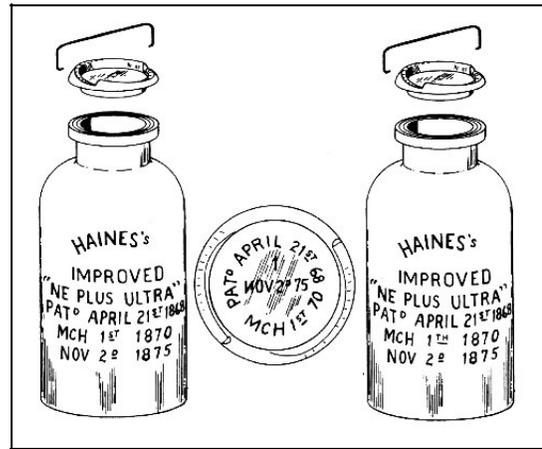


Figure 17 – Haines Ne Ultra Plus jars (Creswick 1987a:76)

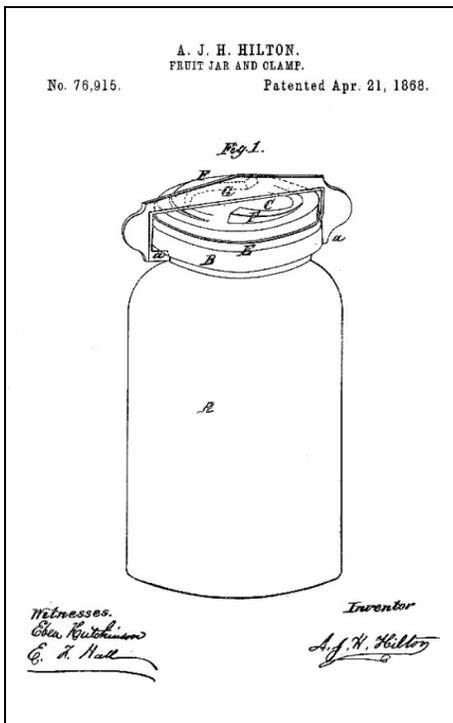


Figure 18 – Hilton 1868 patent

grooved-ring that was the main feature. The Combination jar (see below) had the grooved ring but *not* the smaller grooves to bite into the gasket.

PUTNAM GLASS WORKS (1872-1877)



Figure 20 – Unembossed jar (North American Glass)

The “PUTNAM GLASS WORKS” mark was generally embossed in a circular form on the bases of fruit jars made by the works owned by J.W. Carter, although the same configuration was embossed in much smaller letters on the heels of “large paneled containers.” Some of the marks, usually on bases of larger fruit jars, include ZANESVILLE, O.” with the name of the works, also in a circular format. These should not be confused with the word “PUTNAM” in a horizontal line, the mark of Henry W. Putnam (see the section on Karl Hutter for more information about Putnam). Although the plant was built in 1849, the mark was only used from

ca. 1872 to 1877 (Bartlett 1997:158-159; 2011:117).

Toulouse (1969:251; 1971:429) dated the mark 1860-1870 in his first book and 1852-1871 in his second one, based on his understanding of the years the plant was in business. Creswick (1987a:180) noted the mark but dated it 1852-1871, almost certainly following Toulouse. Barrett (2011:117) noted two configurations. One was embossed “PUTNAM GLASS WORKS” in a circle on the heels of “lager paneled containers.” The second was the one discussed above – on both Haines’s Improved Ne Ultra Plus jars and on jars with no side embossing (Figures 20 & 21). We have not seen examples of the heelmark.

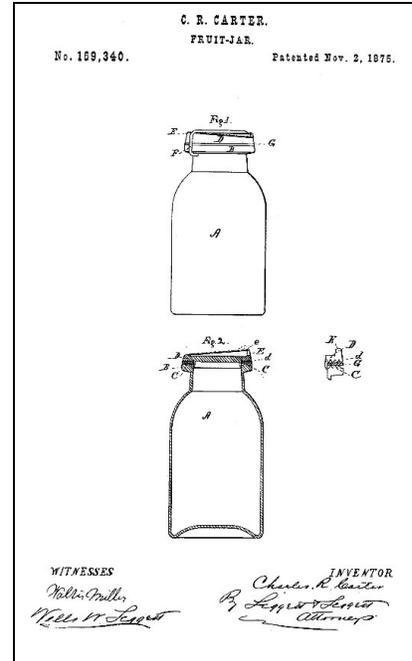


Figure 19 – Carter 1875 patent

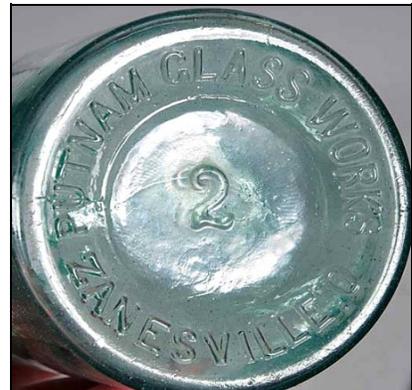


Figure 21 – Putnam basemark (North American Glass)

HAINES COMBINATION (ca. 1875-1877)

Toulouse (1969:140) noted the “HAINES / COMBINATION” jar was the “same as HAINES except finish has very sharply ‘squared’ profile, for which the meaning is unknown” (Figure 22). Roller (1983:145; 2011:225) noted that the base was embossed “PT. PEND.” The lid was embossed “HAINES COMBINATION” on the underside. He added that

the name ‘Combination’ suggests that the jar may have been meant to seal with wax or with the glass lid, gasket and clamp. Although no original clamps are known, the three intersecting grooves in the lid were probably meant to hold a clamp in position. Lids with inclined ramps on the top have been reported, probably a later improvement, as found on other forms of Haines’ jars.

Creswick (1987a:75) illustrated the jar and the lid, noting that the lid could have the three intersecting grooves, or they could be absent (Figure 23). What no one seems to have noticed is shown in the photos from North American



Figure 24 – Combination finish (North American Glass)

Glass. The unembossed jars had grooved-ring wax sealer finishes (Figure 24). The photos clearly show that these had neither the flat finishes with three small grooves from the Haines Patent or Improved jars nor the deep, flat groove of the Haines Combination jar. Apparently, Carter expanded the fruit jar line ca. 1875 in hopes of remaining solvent.

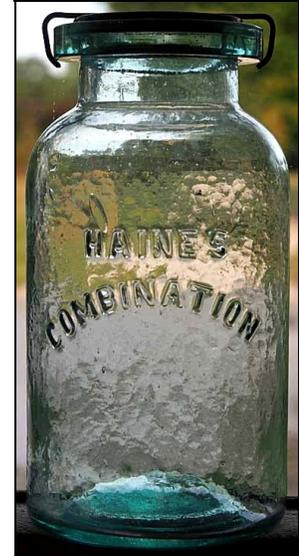


Figure 22 – Haines Combination jar (North American Glass)

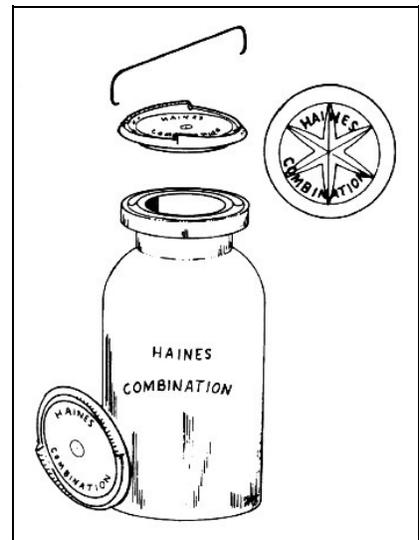


Figure 23 – Haines Combination jar (Creswick 1987a:75)

G.W. Kearns & Co., Zanesville, Ohio (1860-1869)

William C. Cassel and William Galigher began what would later be called the Zanesville City Glass Works in 1852, although the plant was not completed until the following year. On July 1, 1854, Cassel and Galigher dissolved their partnership, and the factory was briefly idled. Thomas Cutter, L.G. Ackley, and William Galigher (Thomas Cutter & Co.) acquired the plant and continued to make containers, while adding fruit jars to the inventory. This firm, too, soon failed, and Josiah B. Allen took over the operation in 1855. Allen also gave up and closed the factory in March 1856 (Barrett 2011:157-163).

Now recovered from their loss of the Putnam Glass Works, George Kearns and Joseph Burns, operating as G.W. Kearns & Co., purchased the former Cassel & Galigher factory – their employer for the intervening years – by April 27, 1860, adding George’s younger brother, Noah Kearns, as a partner. The group operated the Zanesville Glass Works on the “West Side [of] First between Main and Market” (Zanesville *City* Glass Works by at least 1867). The Zanesville works was a green glass plant that made a variety of bottles and vials, as well as fruit jars with lids held in place by wire fastenings (Barrett 1997:93-94; 2011:165-167; Schneider 1966).

Burns died on November 16, 1864, and the remaining group built a window-glass factory at the corner of Main and First streets the same year (Barrett 1997:95; 1998:5). The factory became Kearns, Herdman & Gorsuch in 1869 and continued to make bottles and window glass until the United Glass Co. bought the window glass plant in 1891 (see below).

Containers and Marks

KEARNS & Co.

Toulouse (1971:308) dated the mark 1864 to 1876, although he did not discuss it in the text. We have not found an example of the mark and can only date the possibility of one to the full range of the two companies, 1860-1868; 1878-ca. 1913 (see the second G.W. Kearns & Co. below). Barrett (2011:174-178) did not include this mark in his discussion of marks for G.W. Kearns & Co.

GWK&Co. (mid-1860s-1868; 1878-ca. 1913)

Toulouse (1971:229) attributed the “GWK&CO” mark to George W. Kearns & Co. and dated its use between ca. 1890 and 1900. Lehner (1978:97) followed Toulouse. On eBay photos, the mark appears on the lower body of strap-sided flasks with “GWK&C^o” in an arch and “ZO” (Zanesville, Ohio) in an inverted arch (to form a circle) (Figure 25). Barrett (1997:99; 2011:174) noted the mark on strap-sided flasks and ink bottles but did not assign dates. Strap-sided flasks were made as early as the mid-1860s, although they became popular during the 1870s (Lindsey 2016). Thus, these bottles may have been made any time when either company was in business (see below).



Figure 25 – GWK&Co (eBay)

ZANESVILLE (ca. 1852-1863 and ca 1867-ca. 1875)



Figure 26 – Zanesville City (Glassworks Auctions)

McKearin & Wilson (1978:168, 583, 676-677) described two flasks that they attributed to G.W. Kearns & Co. The earlier container (ca. 1852-1863) was an eagle flask with “ZANESVILLE” embossed across the center of the body above “OHIO.” They did not illustrate the flask, and we have never found an example.

The later flask (ca 1867-ca. 1875), otherwise unembossed, was marked on the front with two ovals, one inside the other. In the space created between the ovals, the word

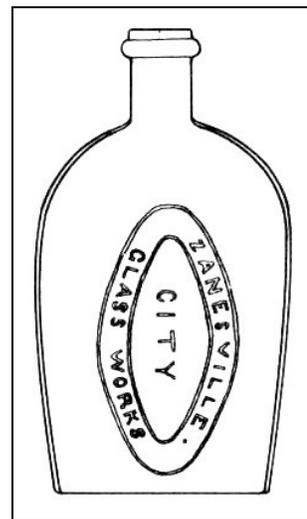


Figure 27 – Zanesville City (McKearin & Wilson 1978:677)

“ZANESVILLE” was embossed at the top, “GLASS WORKS” at the bottom, and “CITY” in the center of the inner circle (Figures 26 & 27). The names were read with the bottle turned on its side and the finish to the left.

More specifically, the flask marked with the Zanesville City Glass Works name should not be dated earlier than 1860. This name was never used by the Putnam glass factory, nor (as far as we know) by the Zanesville plant until after G.W. Kearns & Co. took over from Cassel and Galigher. Consequently, if McKearin and Wilson are correct about the attribution to Kearns, the earliest possible date should be 1860. We have found no evidence that Kearns, Herdman & Gorsuch ever used the term Zanesville Glass Works. The company certainly noted “Zanesville Glass Factories” on their billheads, but that does not reflect the specific name. The first actual printed evidence for the name is the 1876 Kearns, Herdman & Gorsuch catalog. G.W. Kearns, however, used the name again after he separated from the others (see below), although these flasks are almost certainly from the earlier period.

K (ca. 1860-1890)

Barrett (1978:119, 160) noted that “some of the black bottles of crude formation are marked with a simple K and may have been manufactured in early years [of Kearns, Herdman & Gorsuch], though this may have been a mark used by the G.W. Kearns works.” Later in the book, he leaned more toward the earlier company, suggesting a range of ca. 1860-1868. Wilson (1981:52) illustrated a bottle that could have held medicine, glue, or some other household substance that was embossed with a “K” on the base. Unfortunately, he did not photograph the base. The bottle was found at Fort Union, New Mexico (1865-1890).

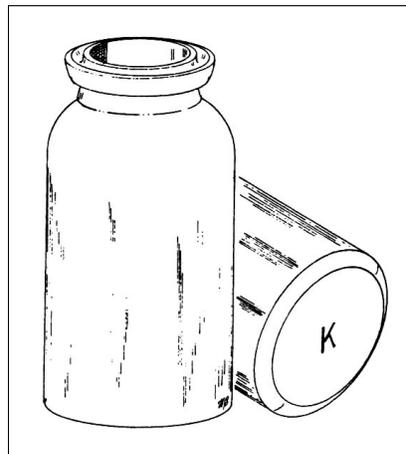


Figure 28 – K base jar (Creswick 1987a:93)



Figure 29 – K base jar (Bill Barrett)

These should not be confused with the blackglass “ale” or “stout” bottle, produced in Britain during the ca. 1880-1900 period. The stout bottles are very common on Western military sites and other locations. Made from three-piece molds, these are often embossed on the side of the push-ups with single letters, multiple letters, and/or numbers. One of the letters that shows up fairly often is “K.” We have speculated that K-marked bottles were made in England (see the Other K section for more information).



Figure 30 – K base peppersauce (eBay)

Creswick (1987a:93) showed a single K embossed on the base of a grooved-ring wax-sealer fruit jar (Figures 28 & 29). She claimed that either Kearns & Co. or Kearns, Herdman & Gorsuch may have been the maker. A “K” also appeared on the base of a mouth-blown amber flask and a Cathedral peppersauce bottle – both offered on eBay. It is impossible to tell if this was made by one of the Kearns companies, or, if so, by which one – although the possibility cannot be eliminated (Figures 30 & 31). These could have been made anywhere between 1860 and ca. 1910. If these older bottles were made by a Kearns factory, we believe that G.W. Kearns & Co. was the likely manufacturer.



Figure 31 – K base flask (eBay)

William Barrett (personal communication, 6/22/2008) discussed two beer bottles, one embossed “J. Horter / Zanesville, O.” in a plate on the side and another similarly embossed with “J. Koenig / Zanesville, O.” Both gentlemen ran saloons in Zanesville beginning in the early 1870s and eventually went into brewing in a small way. Because each of these saloon/breweries had a limited output, it is likely that they ordered small quantities of their bottles locally.



Figure 32 – K base beer (Bill Barrett)

Since bottles for both saloons were marked with a “K” in the center of the base, it is logical that Kearns was the maker (Figure 32). Barrett believed that the bottles were made during the 1880s, so either Kearns, Herdman & Gorsuch (1868-1885) or the Kearns, Gorsuch & Co. (1885-1893) were the likely makers. This extends the use of the simple “K” mark to ca.

1890. In his later book, however, Barrett (2011:174) placed the K-marked bottles in the first G.W. Kearns & Co. section.

G.W. Kearns & Co., Zanesville, Ohio (1878-ca. 1913)

McKearin & Wilson (1978:166-167) noted that:

George Washington Kearns withdrew from the firm [i.e., Kearns, Herdman & Gorsuch – see below] in 1877 and built the “Dinky” plant on Luck Avenue. It was called Dinky because it was smaller than the parent plant on Market Street. Ink bottles, medicine bottles, and flasks are said to have been produced there in the amount of about 45,000 bottles per year. George Kearns died in 1906, and the Dinky plant closed two years later.³

This requires a bit of explanation. In 1868, G.W. Kearns & Co. *became* Kearns, Herdman & Gorsuch (see below). When George Kearns withdrew in 1877, he resurrected the original name. This gives the company two operating dates: 1860-1868 and 1878-ca. 1913. Although the reason has never been recorded, Barrett (2011:277) suggested that Kearns, who always treated his employees as family, may have been dissatisfied with the labor relations as the factory and company grew.

The plant, built by the new G.W. Kearns & Co., actually began production on December 5, 1878. It originally used a six-pot furnace, and its main product was flint glass druggists’ ware. Kearns’ sons, William H. and Charles Edward, joined him at “The Dinky” – always a union plant (Barrett 1997:108-112; 2011:279). In 1897, G.W. Kearns & Co. made “flint prescription vials, brandies, flasks, etc.” with one ten-pot furnace and continued that mode of production until at least 1902 (*National Glass Budget* 1897:4 ; 1897:7; 1898:7; 1902:11). In 1887, Kearns completely renovated the factory, enlarging the capacity to ten pots, still at a single furnace. The plant was back in production by September 12 (Barrett (2011:280).

³ Toulouse (1971:309) claimed the split occurred in 1868, almost a decade earlier than the actual breach. This may have been a typographical error, but his general account is so confused and at odds with the detailed research by Schneider and Greer and by Barrett that it is difficult to credit any of his interpretations of the early history of the Kearns companies.

Kearns was hit during the Panic of 1893 and closed the plant until February 1, 1894. Another shutdown in 1897 was fairly short. George Washington Kearns died on March 3, 1906, but his sons continued to run the factory until July of 1909, when Ed Kearns reorganized the firm as a corporation, moving the operation to the old Dantz farm at the Licking River area just west of Zanesville. Unfortunately, the family must have run into financial difficulties; the new plant was never completed. Although the factory was reported in 1913 with two continuous tanks with 18 rings to make a “general line” of bottles, it is almost certain that the reference was out of date and cited information about the unfinished factory. The 1912 Zanesville city directory reported the old address, but it is unlikely that either factory made any glass after 1909 (Barrett 2011:287-293; *Journal of Industrial and Engineering Chemistry* 1913:953; *National Glass Budget* 1909).

The Thomas Registers were even more misleading, listing G.W. Kearns & Co. as producing “Mineral Water; Extract; Flint; Liquor; Prescription; Green; Beer; Patent Medicine; Pickle” bottles and fruit jars from 1907 to 1917, although fruit jars were dropped during the last few years (Thomas Publishing Co. 1907:160, 799; 1917:730). The Thomas Registers frequently failed to catch factory closings and retained listings for several years after companies had ceased operations.

Containers and Marks

GWK (1878-ca. 1909)

Speaking of products made at “The Dinky,” Barrett (1997:144) noted that some bottles “are very simply marked on the bottom of the container with **GWK** or **G.W.K.** These are the only pieces that can have a definitive attribution and all are in colorless glass.” The only example we have found was illustrated in Barrett (2011:300), and these should be dated 1878-ca. 1913 (Figure 33). The vast majority of products were generic and unmarked.



Figure 33 – G.W.K. (Barrett 2011:304)

Kearns, Herdman & Gorsuch , Zanesville, Ohio (1869-1885)

In January 1869, George and Noah Kearns reorganized their enterprise to form a new company with James W. Herdman⁴ and Joseph T. Gorsuch as partners, naming the new firm Kearns, Herdman & Gorsuch. Herdman was a financier, and Gorsuch was a local businessman, decorated Civil War veteran and sometime politician (Barrett 1997:101; ; 2011:179 Caniff 2006:9; Schneider and Greer 1956g).⁵ This name replaced the older, G.W. Kearns & Co.

The window glass plant was virtually destroyed in March of 1870 but was rebuilt by the following summer. An 1870 billhead noted that the firm made “window glass, colored bottles, demijohns, fruit jars and druggists’ glassware” (Caniff 2006:9). The firm enlarged the capacity of the flint glass (bottle) plant in 1875, and the company became the first in that part of the country to produce lamp chimneys. The flint glass factory operated ten shops at that point (Barrett 1997:101-106; 2011:181-186).

William T. Grey joined the firm ca. 1875 and became the secretary. Although he was experienced in management, he was not knowledgeable about glass making. As noted above, George Kearns withdrew from the company at some point during 1877 – possibly because he was miffed at Grey. When George withdrew, however, his brother, Noah, remained with Kearns, Herdman & Gorsuch (Barrett 1997:106-107; 2011:186-187).

At the close of the decade, the company became involved in a widely publicized labor dispute. Although this involved its window glass – not bottle – production, it may provide some insight into the earlier departure of G.W. Kearns. A brief summary (from the management perspective) was given by Schneider and Greer (1956g):

⁴ The Gorsuch obituary noted Herdman’s name as F.H. Herdman (Caniff 1006:9). City directories, however, listed the first name as “Jas.” and a billhead listed him as “James W.” (Barrett 1995:104, 109).

⁵ Toulouse (1971:308-309) stated that the company became Kearns, Herdman & Gorsuch in 1876, but this is refuted by some pretty solid evidence in Barrett.

In 1879 the Glass Blowers union had compelled the blowers to agree to regulations that were not acceptable to the owners. Having large orders to fill, the company did nothing at the time. But when work was slack the owners discharged their window glass blowers and gatherers and employed Charles D. Williams of Kent, Ohio to go to Belgium and employ 24 glass workers. They came from Charleroi and arrived in New York on Dec. 18, 1879, where they were met by W.T. Gray.

The Belgians stayed at the Sherman house on lower Main street and Hartmeyer's boarding house across the street. On Dec. 22, Judge Ball granted a temporary injunction against David S. Swearer, president of the union at Pittsburgh, and [twelve] discharged employe[e]s, restraining them from interfering in any way with the Belgians . . .

Emile Bouillet was foreman of the Belgians. Writing in the Times Signal on Aug. 8, 1926, Thomas W. Lewis described his recollections of the foreigners. He said, "When through their turns at the works, they would make a rush for their nearby boarding places, wearing but little clothing, their faces red with the heat radiated from the great melting pot and dripping with sweat."

Not noted in this account is that a subsequent permanent injunction by Judge Ball not only prevented the union from communicating with the Belgians but was supplemented by the judge's statement that he looked upon "all trades unions as against the laws of . . . Ohio and the constitution of the United States." Since this precedent threatened the labor relations of the entire industry, Kearns, Herdman & Gorsuch were publicly denounced by all the Pittsburgh window glass manufacturers for acting in bad faith. Since all the discharged workers were hired by another factory, the union did not appeal in court. Rather, it sent representatives to Belgium to convince glassblowers there not to contract with American companies without examining the situation on the ground. It may be noteworthy that a labor convention in Zanesville in 1898 passed a resolution endorsing the G.W. Kearns Glass Co. (but pointedly not the larger Kearns-Gorsuch operation) "for its treatment of labor" (*Crockery and Glass Journal* 1880a-c; Walls 1881; Delphos Herald 1898).

The firm began the production of fruit jars in the summer of 1880 and was reorganized in 1886 as the Kearns-Gorsuch Glass Co. (Barrett 2011:187-191).

Containers and Marks

Barrett (2011:193) suggested that Kearns, Herdman & Gorsuch continued to use the “K” logo embossed by G.W. Kearns & Co. until the molds wore out.

KH&GZO (1869-1886)

We have found “KH&GZO” in a circular format on shoe-fly flasks, jar, and bottle bases (Figure 34). The mark was obviously used by Kearns, Herdman & Gorsuch, Zanesville, Ohio.

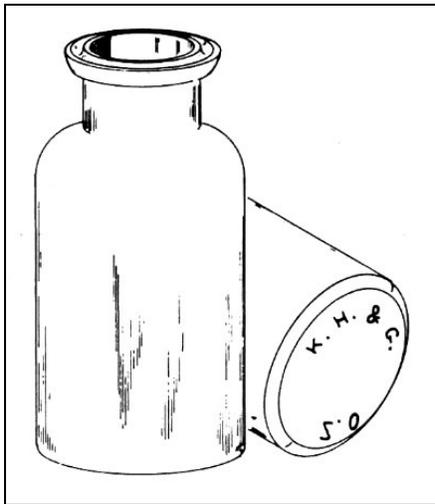


Figure 35 – KH&GZO - fruit jar (Creswick 1987a:94)

Toulouse (1969:172) noted the logo on the base of a grooved-ring, wax-sealer fruit jar, dated ca. 1876, but the mark was absent from his 1971 book. Roller (1983:180) also discussed the same jar. Creswick (1987a:94) illustrated this mark and jar (Figure 35) and correctly identified the company but dated the jar ca. 1876-1884. Lehner (1978:97) correctly identified the mark with the Kearns combine but failed to include a date range. This mark cannot be more closely dated than the full range of the company, 1869-1886.



Figure 34 – KH&GZO - ink & pickle (Bill Barrett & eBay)

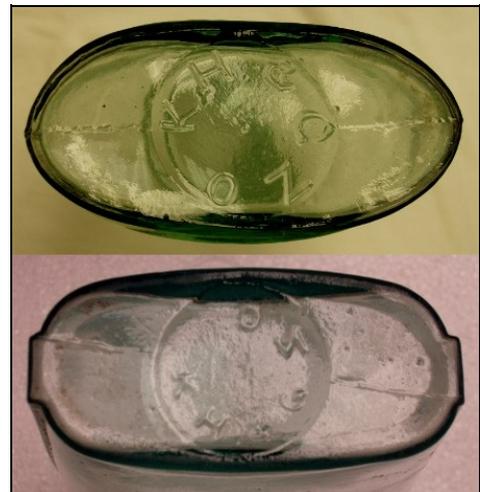


Figure 36 – KH&GZO - flasks (Bill Barrett)

McKearin & Wilson (1978:576, 582) and Barrett (1997:159) noted flasks with the KH&GZO mark (Figure 36). An American Eagle flask had the mark on the base of the neck in a circular format. Ring (1988) listed a K.H.&G.S.O mark in a circle on the base of a Dr. Bull's Electric Bitters bottle. She may have mis-recorded an "S" where the mark should have had a "Z" (possibly a backwards "Z")⁶ although, the possibility exists that this was another engraver's error, one of at least two noted for Kearns, Heardman & Gorsuch. Various bottles show that the letters were sometimes embossed to be read clockwise and other times to be read counterclockwise.

O.K.H.T.G.Z. (1869-1886)

Wilson (1981:4, 123) illustrated a single bottle excavated at Fort Union (1863-1891) embossed "O.K.H.T.G.Z." (with a reversed "Z") around the perimeter of the base (although he called the last letter an "S" on page 7). The bottle was "blue" in color and had a "tooled, plain, broad, sloping collar" (Figure 37).⁷ The same mark appeared in Jones (1966:8; 1968:24), probably referring to the same bottle. None of the other available sources mentioned this logo. In examining Wilson's drawing, we initially thought that it appeared to be a cylindrical whiskey bottle made in a three- or four-piece mold because of the distinct ring around the upper body just below the shoulder.

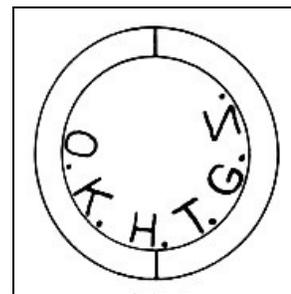


Figure 37 – O.K.H.T.G.Z.
(Wilson 1981:4, 123)

However, Wilson (1981:4) noted that the bottle was embossed with "a five-pointed star on the shoulder and an inscription on the body which reads 'S^T L.B.B.Co.'" The location of the embossings, in conjunction with the ring just below the shoulder confirm the identification of bottles as being made in a four-piece mold. No other arrangement can account for these characteristics.

⁶ Bartlett has an example of this bottle with a correct "Z" – so the Ring "S" may just be a recording error.

⁷ Wilson's descriptions, while adequate for the 1980s, leave something to be desired. The "blue" for the bottle color may be aqua or light blue, and the one-part finish was certainly applied, not tooled.

A search of Van Wieren (1995) failed to disclose any brewery with the “St.L.B.B.Co.” initials. However, a label illustrated in Kay (2007:118) was made for the St. Louis Brewery Bottling Co. The shape and coloration of the label resembles an early Anheuser-Busch label (Kay 2007:120). Such copying of the popular Anheuser-Busch labels was very common until ca. 1883. Thus, the bottle in Wilson (1981:4) was almost certainly an early export beer bottle.

The mark had to have been intended to be “KH&GZO” (discussed above). The engraver may have selected the wrong tool and stamped a “T” instead of an ampersand (&) and placed the “O” in an incorrect location. That would have made the initials for Kearns, Herdman & Gorsuch, Zanesville, Ohio.

An alternative explanation for the T/ampersand has to do with the methods of ordering molds in 19th century. Most glass houses did not make their own molds until the late 1890s. When they ordered a mold, they wrote to the makers in long-hand cursive. Several forms of handwritten ampersands could easily be mistaken for the letter “T” (Figure 38). This mark was almost certainly only engraved on one mold. It could have been used at any time during the 1869-1886 period.

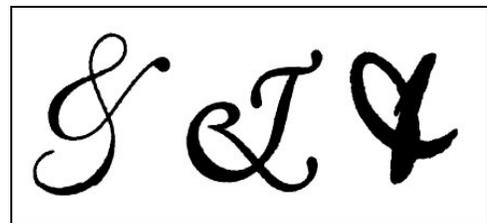


Figure 38 – Cursive Ampersands

ZKH&CO. (1869-1886)

Ring (1980:479) noted the ZKH & Co. mark on a bottle of Wallace’s Tonic Stomach Bitters. The product was advertised from 1878 to 1888. The mark represents Kearns, Herdman & Co., with the “Z” out of place – an almost certain a corruption of the KH&GZO logo. It may have been misreported to (or mis-recorded by) Ring, or it may have been another engraving error similar to the one discussed immediately above.

K.H.&G. (1869-1886)

Lehner (1978:97) attributed the K.H.&G. mark (Figure 39) to Kearns, Herdman & Gorsuch based on Toulouse (1971:308). Toulouse dated the mark 1876 to 1881 in reference to



Figure 39 – KH&G basemark
(Bill Barrett)

his dating for that company. The mark was horizontally embossed on the base of at least one bottle type. Like the other marks above, this could have been used at any point between ca. 1869 and 1886. Barrett (1997:xxi) illustrated and described a blob-top soda bottle embossed with “K.H.&G.” above the heel (Figure 40).



Figure 40 – KH&G
heelmark (eBay)

KH&Go (1869-1886)

Barrett has an eagle flask embossed “KH&Go” – an error mark that should have been either KH&GZO or KH&G. This could have been produced any time during the 1869-1886 period when Kearns, Herdman & Gorsuch were in business. This may have been mis-read and misinterpreted by some to suggest that there was a Kearns, Herdman & Co.

Kearns, Gorsuch & Co., Zanesville, Ohio (1885-1893)

On February 3, 1886, Kearns, Herdman & Gorsuch was reorganized as the Kearns, Gorsuch & Co. with a capital of \$200,000. J.T. Gorsuch was president, with William T. Gray as vice president, James Herdman as secretary, and Noah Kearns as superintendent (Barrett 1997:119; 2011:199). The company bought additional land in 1887 and expanded its plant the following year. It operated three plants until it sold the window-glass factory to the United Glass Co. in 1891 (Schneider and Greer 1956g; 1956h; Barrett 1997:124; 2011:200-209).⁸

⁸ When United failed two years later, Kearns-Gorsuch reclaimed the factory but shut it down (Barrett 1997:125). McKearin & Wilson (1978:166, 168), however, stated that the plant operated intermittently after that until production of window glass ceased in 1895.

Kearns-Gorsuch Bottle Co., Zanesville, Ohio (1893-1937)

Because of the Panic of 1893, the company reorganized again with a capitalization of \$150,000, the newly named Kearns-Gorsuch Bottle Co. being a division of the Kearns-Gorsuch Glass Co. (Barrett 1997:125; 2011:213-215).⁹ About 1894, the factory obtained continuous tanks, although hand production remained the standard.¹⁰ Pressing machines were probably in operation to produce fruit jar lids (Barrett 1997:126). Toulouse (1971:309) noted that the plant made turn-mold bottles in 1895 – the year a fire under

an old boiler ignited causing a delay for repairs. In 1897, Kearns-Gorsuch operated “one continuous tank, 14 rings, on green bottles.” Their flint furnace was idle at the time of the listing. This was, in fact, a period of financial difficulties for the firm (Barrett 2011:219-221).

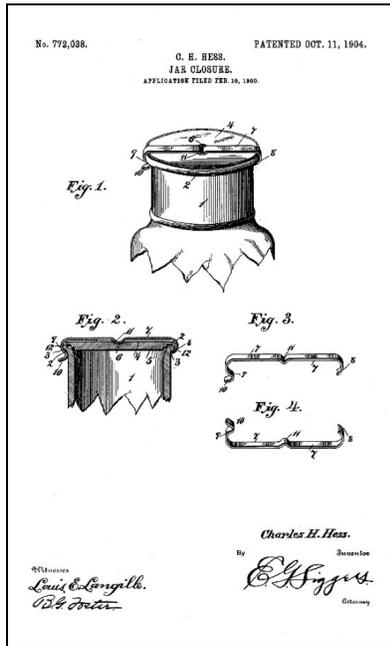


Figure 42 – Hess 1904 patent

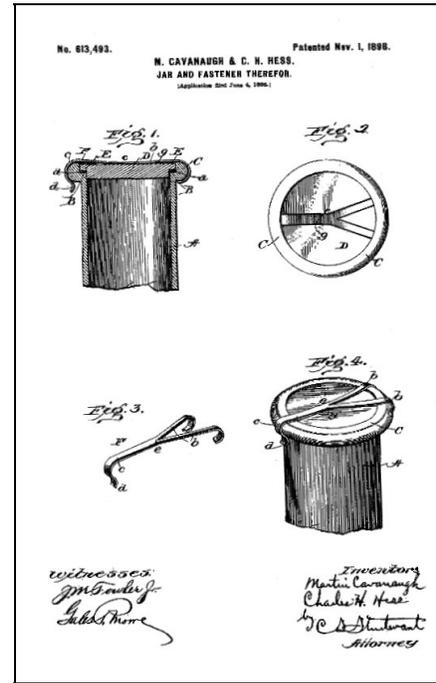


Figure 41 – Cavanaugh & Hess 1898 patent

On June 4, 1898, Martin Cavanaugh (plant manager) and Charles Hess applied for a patent for a “Jar and Fastener Therefor” and received Patent No. 613,493 on November 1 of the same year (Figure 41). The lid was flat, held in place by a “Y” shaped clip. The firm advertised the result as a “New Fruit

⁹ Barrett (1997:125) – the first researcher to recognize the 1893 reorganization and renaming – offered no rationale for the dual corporations. It may be that the return of the window glass factory from United Glass suggested the dual organization. Alternately, Kearns-Gorsuch Glass may have simply been a holding company.

¹⁰ Schneider and Greer (1956h) report that the 1888 expansion included a tank furnace, but the source used may not be correct.

Jar Stopper” and had great hopes for improved sales. Soon, however Charles Hess invented an improved variation. On July 28, 1899, Hess applied for a patent for a “Jar Cap Fastener” and received Design Patent No. 31,435 on August 22 of that year. Called the Rival Spring Top, it was much more popular (Barrett 2011:222-223). Hess followed up with a further improvement, applied for on February 10, 1900, and received (Patent No. 772,038) on October 11, 1904 (Figure 42). This was essentially a letters patent to further protect the 1899 design.

The Muskingum River flooded in 1898, inundating all the buildings and causing severe damage. However, by the turn of the century, the company operated “one of the most up to date facilities in the entire country.” In 1901, the firm added a Haley automatic press with a promise that more would follow. A second disaster occurred on March 2, 1902, when a fire destroyed the flint glass works and a warehouse (Barrett 1997:126-127).

The *Zanesville Signal* announced on April 12, 1902, the invention of a new glass blowing machine by Charles Hess and Charles Fogle, with a new patent pending. Apparently, the patent never arrived. Barrett (2011:226-227) stated that he made an extensive search and could not find a patent document. However, this was a time for machines. The firm added more lid presses, such as the Gordon & O’Neill cap machine.

In 1904, the plant operated one day tank and one continuous tank with a total of 13 rings (*American Glass Review* 1934:163). The company made “Mineral Water; Extract; Flint; Liquor; Prescription; Green; Beer; Patent Medicine; Pickle” bottles and fruit jars in 1905 (Thomas Publishing Co. 1905:104, 577) and continued experimenting with semiautomatic machines. The plant had a single “Heintz” machine in 1905 “making wide-mouths and preserve ware” (Barrett 2011:228; *National Glass Budget* 1912:1).¹¹ The factory replaced the day tank with a second continuous tank in 1907, bringing the total of working rings to 16 (Toulouse 1971:309).

¹¹ Barrett (2011:228) explained that a slip of paper in the Board of Directors’ minutes book indicated that the machine was probably one of the ones invented by Jesse O. Johnson. Johnson applied for a glass machine patent on April 2, 1902, and received Patent No. 781,685 on February 7, 1905. He applied for another one on November 30, 1903, and received Patent No. 783,046 on February 21, 1905. Unfortunately, the patent drawings did provide clues to the probable mold lines the machines would have left.

The year 1908 saw the installation of O'Neill machines to make wide-mouth bottles, including olives, preservers' ware, oil "cans," milks, and fruit jars (Barrett 1997:131; 2011:231). By 1909, the plant had blow shops, and "seven O'Neill machines working on jars and bottles and two or three lid presses making caps for double safety jars." (*Commoner & Glass Worker* 1909:1).

Frank O'Neill began working in the Zanesville plant on experimental machines and actually had one working on small-mouth bottles in 1909 – several years before his small-mouth machines were generally available – making occasional beer, catsup, and similar bottles. However, O'Neill abruptly left the area, creating a sticky situation where Kearns-Gorsuch owned a one-third interest in the machines, but O'Neill was now working with the Turner Bros. (see that section for more information) at Terre Haute, Indiana. O'Neill apparently disposed of the patent (No. 994,421) that he received on June 6, 1911, without the knowledge or consent of Kearns-Gorsuch (Barrett 2011:233-237). For more on the O'Neill machines, see Lockhart (2013).

The company purchased an additional factory at Barnesville (see below) in 1912. In 1913, the Kearns-Gorsuch Bottle Co. used mouth-blown and semiautomatic machine methods to produce a "miscellaneous line" of bottles that included "pickle, olive, condiment and liquor ware" in three continuous tanks with 27 rings (*Journal of Industrial and Engineering Chemistry* 1913:953). Disastrous floods in 1913, caused extensive damage to the plant, but the firm continued to work at the Barnesville factory (Barrett 1997:131; 2011:237-238).

Kearns-Gorsuch began a transition to Miller machines, beginning with three wide-mouth machines in 1913 but ordered a narrow-mouth semiautomatic machine from O'Neill the following year – apparently forgiving the former transgressions. Gorsuch died in 1914, and his son, Ralph, succeeded him as president of the corporation – apparently maintaining the same policies. The O'Neill machine worked so well that the firm ordered a second one in 1915. Orville A. Bridges, foreman of the machine shop, invented a gravity based feeder to accompany the O'Neill machine, making the operation fully automatic (Barrett 2011:240-241). Bridges applied for a patent for an "Apparatus for Severing Molten Glass" on June 28, 1915, and received Patent No. 1,207,363 on December 5 of the same year – assigning half the rights to Kearns-Gorsuch (Figure 43).

By 1917, the Kearns-Gorsuch Bottle Co. made “Mineral Water; Extract; Liquor; Pickle, etc.” bottles, candy jars, and fruit jars. The listing continued until at least 1921. The 1920 listing for fruit jars stated that those made by Kearns-Gorsuch were “Lightning style glass top” (Thomas Publishing Co. 1917:731; 1918:810, 4430; 1920:827, 4614, 4616; 1921:781, 4571-4572). The Kearns-Gorsuch Bottle Co., with factories in Zanesville and Barnesville, Ohio, installed Hartford-Fairmont automatic machines in late 1919. The September 27, 1919, ad in *Glassworker* did not mention the machine, but the January 17, 1920, ad gave the “Hartford Fairmont Automatic Process” prominence.¹²

In January 1920, Kearns-Gorsuch merged with the Hazel-Atlas Glass Co. but retained its identity. The company built a second factory in Zanesville that opened on January 8, 1923. The old plant became No. 1 and made smaller containers at its smaller tanks, generally of flint glass. By 1925, the plant converted to the production of cobalt blue glass – e.g., Vicks jars. Plant No. 2, the new one, made flint containers of all sizes at its massive furnaces. By 1924, all the old O’Neill machines had been replaced by Lynch machines (Barrett 1997:136-138; 2011:245; Evans 1928:16; Toulouse 1971:310).¹³

In 1927, the plant used Hartford-Empire machines exclusively to make “prescriptions and vials, flint and blue minerals, patent, proprietary, packers and preservers.” Plant No. 1 (usually known as the “downtown facility”) had two continuous tanks, with two more at Plant No. 2. The Hazel-Atlas Glass Co. was listed as the “sales manager and purchasing agent” by 1927. The listing changed slightly in 1929 to “packers and preservers, fruit jars, bottle specialties and colored glassware.” Plant No. 2 added a third continuous tank in 1932, and the

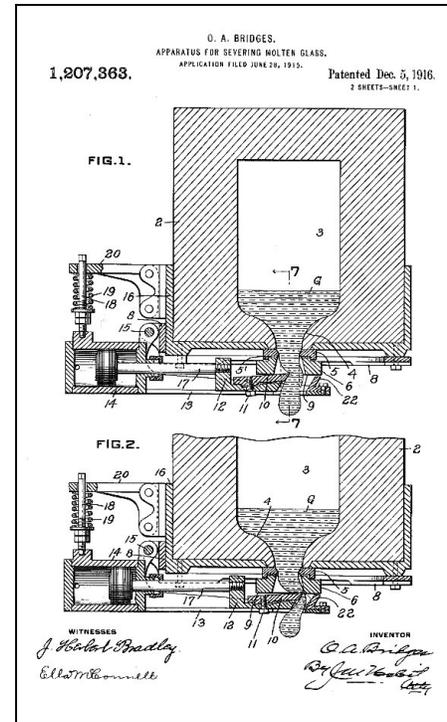


Figure 43 – Bridges 1915 patent

¹² According to Barrett (2011:244), the first Hartford-Fairmont machine was installed in December 1918.

¹³ As of this writing, we have not researched the Lynch machines.

listing continued the same until at least 1936 (*American Glass Review* 1927:137; 1929:99; 1932:74; 1936:92). Miller machines began to replace the Lynch machines by 1935, especially in the larger, more modern, Plant No. 2.

In 1937, the Zanesville corporation merged completely with Hazel-Atlas, and the combined firm dropped the use of the Kearns-Gorsuch name. The Continental Can Corp. merged with Hazel-Atlas on September 14, 1956 and closed Plant No. 1 permanently on October 1, 1958. The courts ordered Continental Can to divest itself of certain holdings in 1963, including the Zanesville plant. The Brockway Glass Co. picked up that part of the business on February 26, 1964, and razed the old No. 1 plant (Barrett 1997:140-141; 2011:263-270; Creswick 1987a:276; Toulouse 1971:310). Plant No. 2 was still open as Plant No. 12 of the Brockway Glass Co. in 1982 and remained in operation when Owens-Illinois, Inc. purchased Brockway in 1988 (*Glass Industry* 1982:18; Owens-Illinois 2001).

Kearns-Gorsuch Bottle Co., Barnesville, Ohio (1912-1919)

The Barnesville factory was the former plant of the Barnesville Glass Co. (possibly the Barnesville Bottle Co.). Little is known of the earlier plant, although Kearns-Gorsuch bought the company in 1912 (Barrett 1997:131; McKearin & Wilson 1978:168). The plant was not operational, however, until December 1912 or January 1913 (*Wichita Times* 12/12/1912). In late 1919, Kearns-Gorsuch installed Harford-Fairmont machines in the Barnesville factory as well as the Zanesville plant. The Barnesville plant was destroyed by fire on March 3, 1921. The company then built a second plant at Zanesville in 1923 to make narrow-neck bottles, jugs, tumblers, and other products (Barrett 2011:253; Evans 1928:16; *Sandusky Star Journal* 1921; Toulouse 1971:310).

Containers and Marks

Unfortunately, the Kearns-Gorsuch Bottle Co. catalog for 1916-1917 failed to note any manufacturer's marks. The catalog noted "mould" numbers for each style of bottle, including different numbers for each size. In the Pickle Bottles section, the catalog illustrated two featured pickle bottle styles, including the base with a patent number. The bases of Tall Fluted Ovals and Fluted Triangles were both embossed "PAT / AUG 20 / 1901." Charles H. Hess

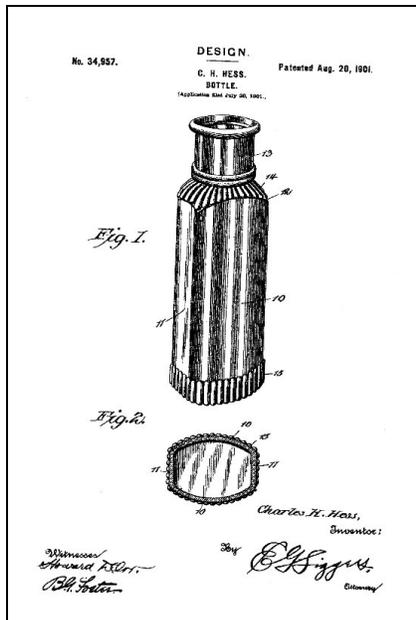


Figure 44 – Hess 1901 patent

applied for his bottle design on July 26, 1901, and received Patent No. 34,956 on August 20, 1901. Hess also both applied for and received a second bottle design patent on the same respective dates, this one for Patent No. 34,957. He assigned both patents to the Kearns-Gorsuch Bottle Co. The patent drawings are perfect matches for the illustrations of the two bottles on pages 18 and 19 of the catalog (Figures 44 & 45).

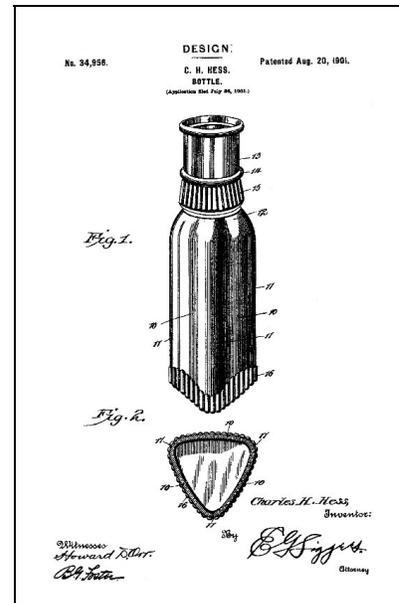


Figure 45 – Hess 1901 patent

The company made promotional items that included its full name. These included a commemorative bottle-shaped paper weight embossed on the side “KEARNS-GORSUCH / BOTTLE Co. / ZANESVILLE, O. / MAKERS / OF EVERYTHING IN FLINT / GLASS BOTTLES” and a paper clasp with the same information stamped or embossed on the metal (Barrett 1997:xxxiv). An eBay auction also included a bottle-shaped pocket knife with the company name (Figure 46).



Figure 46 – KG pocket knife (eBay)

K.G.B.Co. (ca. 1900-ca. 1920)

This mark was embossed horizontally across the bases of some pickle bottles (Figure 47) as well as on the heels of Hutchinson soda bottles, such as the one illustrated and describe by Barrett (1997:xxxii). Lehner (1978:97) identified the mark as that of the Kearns-Gorsuch Bottle Co., and Toulouse (1971:308) dated the mark ca. 1900. Von Mechow (2016) discovered three Hutchinson bottles embossed either “K.G.B.Co.” or “K.G.B.Co.#1” on the heels and Hutchbook

(Fowler 2016) noted a total of 36 Hutchinson bottles with the two marks on the back heels. The only examples we have seen were mouth blown. The plant continued hand production until at least 1913 and may have discontinued it when the factory installed Hartford-Fairmont machines in late 1919. The mark was certainly no longer used by 1920, when Hazel-Atlas bought the company and began using the Oval K-G mark (see below).



Figure 47 – KGBCo (Bill Barrett)

KGBCo Monogram (1893-ca. 1920)

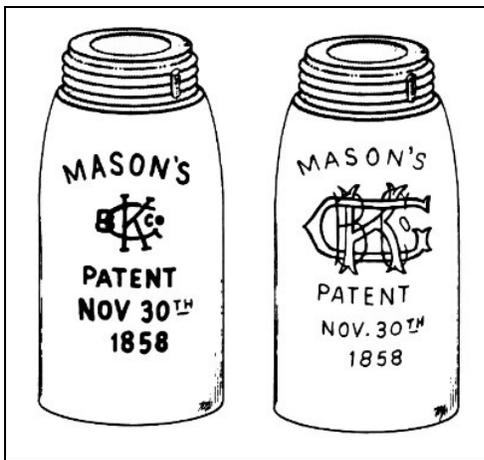


Figure 48 – KGBCo monogram (Creswick 1987a:143)

Creswick (1987a:143) showed two different Mason jars with KGBCo monograms embossed on the front (Figures 48 & 49). In both



Figure 49 – KGBCo monogram (eBay)

cases, she named the maker as Kearns-Gorsuch Bottle Co. and dated the company (not the jar) 1885-1937. Given the current understanding of the chronology of the company, we would reduce that range to the ca. 1893-ca. 1920 period. Roller (1983:234) explained:

These jars have been attributed previously to Kilner Brothers Glass Co., of England. I believe the enlargement of the “K” and “G” in the monogram, the fact that Kearns-Gorsuch Bottle Co. made fruit jars, and the frequent finding of these jars in southern Ohio, makes Kearns-Gorsuch Bottle Co. the probable maker.

Roller’s “attributed previously” referred to Toulouse (1969:173-174). Toulouse described four variations of Mason jars with what he called a KBGCo monogram, used by the

Kilner Brothers Glass Co., Conisbrough and Thornhill Lees, England. Two variations were reported by Toulouse as being embossed on the base with “KBL” in addition to the monogram – a basemark Toulouse identified as “Kilner Bros. Ltd.” Neither Creswick nor Roller, however, mentioned the “KBL” basemarks.

Barrett (1997:133; 2011:229) resolved the issue for all time. He reproduced an “ink blotter advertising for Kearns-Gorsuch, 1906.” In the center of the blotter was the unmistakable KGBCo monogram. The monogram also appeared on the covers of the ca. 1908 and 1916 Kearns-Gorsuch catalogs (Figure 50). Barrett (1997:132) noted that the monogram was first used during the reorganization of 1893.¹⁴



Figure 50 – Catalog Cover 1916 (Barrett 2011:254)

However, Barrett (1997:162) illustrated another monogram, made with a “G” superimposed over a “K” followed by “BCo.” He noted that this monogram, too, was “used after 1893.” We have not yet located an example of this mark, although this could be a mistaken rendering of the second monogram illustrated by Creswick. In his revision, Barrett (2011:250) only discussed the two more common variations – *not* including this third one.

KG (ca. 1920-1937)



Figure 51 – KG

Caniff (2007:8) noted the use of this mark on fruit jars by Kearns-Gorsuch, although he gave no specific examples. Toulouse (1971:308) dated the logo ca. 1910-1937, but we suggest that the mark was probably used after Hazel-Atlas acquired the firm but while it



Figure 52 – KG (eBay)

¹⁴ Barrett (personal correspondence 6/4/2008) noted that Dick Roller had earlier mentioned the monogram on the cover of a 1908 Kearns-Gorsuch catalog.

still had its own identity (ca. 1920-1937). Our only certain example (another could be G6) was on the base of a Curtice Brothers catsup bottle (Figures 51 & 52). The mark is probably a variation of the “K-G” logo.

K-G in a horizontal oval (1920-1937)

Kearns-Gorsuch registered trademark No. 138,652, K-G in a horizontal oval, on January 4, 1921, and the company claimed the mark was first used on May 1, 1920 (after the acquisition by Hazel-Atlas), “for glass bottles and jars” (Figure 53). The trademark was “molded or impressed in the goods, and applied to the packages containing the same by means of labels, on which the trade-mark is shown” (Barrett 2011:253; also see Creswick 1987b:152). The logo also appeared on the cover of the Kearns-Gorsuch 1920 catalog. Lehner (1978:97) showed this mark both with the encircling oval and standing alone. Oddly, she ascribed the first to Kearns & Co. and the second to “Kearns & Gorsuch.”

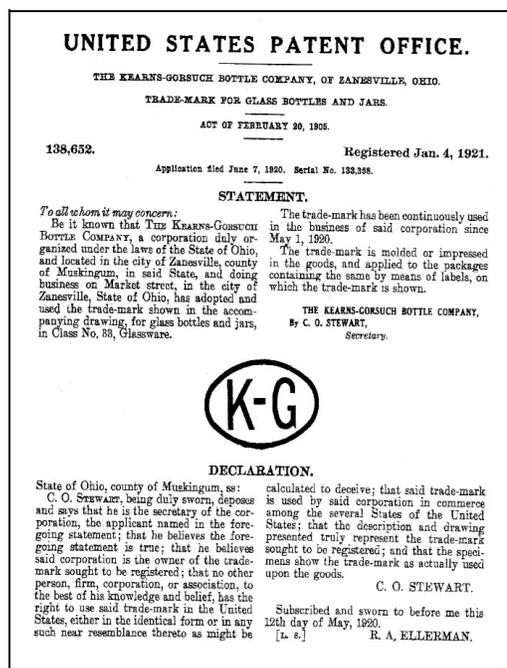


Figure 53 – Oval K-G trademark (Barrett 2011:253)



Figure 54 – Oval K-G (eBay)

Caniff (2007:7) discussed this mark on the bases of candy jars and the accompanying codes (see section on “K” below). Toulouse (1969:171-172; 1971:308) originally described the mark in an oval and dated it ca. 1915-1937. Later, he failed to mention the oval and dated the mark ca. 1910-1937. As demonstrated above, the mark was not used prior to 1920 and was undoubtedly continued until the final consolidation with Hazel Atlas in 1937. Barrett (1997:160) described the mark as “K-G in an ovate square” (Figure 54).

K-plus numerical code (ca. early 1920s-ca. 1937)



Figure 55 – 14-7 / K base



Figure 57 – K bottle (eBay)

Caniff (2007:7-9) noted that some fruit jars made by the Kearns-Gorsuch Bottle Co. bore the K-G mark in an oval accompanied by “5-444” (see Figure 54). Similar jars were



Figure 56 – K logo (eBay)

embossed “1-K-444” or “1-K444” on the base without the K-G logo. Another size jar was embossed “16-K-643” on the base. Hazel-Atlas included the same jars in their 1930 catalog¹⁵ with the HA logo and the designations “K-444” and “K-643” on the bases. Thus, a “K” mark, accompanied by a three-digit number, almost certainly indicated the former Kearns-Gorsuch plant on Hazel-Atlas jars (also see section on Hazel-Atlas). Barrett 2011:273) was unsure of the timing but agreed with Caniff.

We have found a bottle embossed on the base with “14-7 / K” (Figure 55). Nathan Briggs excavated nine machine-made prescription bottles – all from a 1920-1940 context – embossed “K 1” to “K 24” the bases (Figures 56 & 57). This may well have been a mark used during the 1920-1937 period when Kearns-Gorsuch still retained its identity but was owned by Hazel-Atlas. Jars with



Figure 58 – H over A plus K (Bill Barrett)

¹⁵ This brings up an interesting conundrum. Even though Kearns-Gorsuch was listed under its own name until 1937, it appears that Hazel-Atlas advertised products made by the Kearns-Gorsuch factory in its catalogs at least as early as 1930. Alternatively, identical bottles may have been made by both the Zanesville factory and another Hazel-Atlas plant.

both the “K” mark, followed by a dash, then a three-digit number as well as the Hazel-Atlas “H over A” mark should be dated after 1937 (Figure 58). See the Hazel-Atlas section for a discussion of these marks used by their former Kearns plant.

In 2008, Bill Barrett sent several photos of small generic bottles embossed with the letter “K.” These cobalt blue and colorless bottles had machine scars on the bases as well as complex numerical codes. Nathaniel Briggs discovered and reported several colorless, machine-made prescription bottles embossed on their bases with “K” plus a single-digit number. It is possible that these bottles were also made by Kearns-Gorsuch during this 1920-1937 period.

Later Codes

Barrett (2011:273) was uncertain when the Zanesville plant adopted the Hazel-Atlas H-over-A logo, although we suggest that ca. 1937, the year of the name change, is a probably time. Barrett further noted that Continental Can used the “three nested C’s” trademark with the number 12 to the left indicating the Zanesville plant. Brockway’s Circle-B logo also had the Zanesville 12 to the left.

Discussion and Conclusion

The Kearns family glass factory histories are complex, but the thorough research compiled by Bill Barrett has mostly eliminated any confusing periods. Most of the marks, however, may only be dated to the full length of each specific company. At this point, we have found no date codes of any kind associated with bottles made by any of the Kearns enterprises.

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