

The Dating Game: Hermann Heye Glasfabrik

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History

Hermann Heye Glasfabrik, Obernkirchen, Germany (1843-1945?) Heye-Glas, Obernkirchen, Germany (1945?-present)

On July 17, 1799, the Electorate of Hesse granted Johann Conrad Storm permission to build a glass factory outside the gates of Obernkirchen, Germany (ca. 25-30 miles west of Hannover). Storm immediately began building his plant with two furnaces, lehrs and outbuildings. A victim of Napoleon's export restrictions, the factory was sold at auction in 1822. Friedrich August Becker acquired the plant for 5,000 Thaler and demolished it. Becker had built Wendthöhe glass house at nearby Stradthagen in 1817 and rebuilt the former Storm plant at Obernkirchen (Heye-Glas 1999:12-16).

Born in 1792, Caspar Hermann Heye created the Hermann Heye company, a jobber in glass products, in Bremen in 1819. By 1821, Heye was a major trading house. Heye became a partner in the Obernkirchen factory, now called F. A. Becker & Co., in 1823. A hurricane created so much damage in 1827, that the buildings had to be rebuilt. At some point during this period, the partners opened a branch in Bremen, and created a subsidiary in Hamburg in 1840. On December 10, 1843, Caspar Hermann Heye became the sole proprietor of the former Becker plant, newly renamed Hermann Heye Glasfabrik (Heye-Glas 1999:16-17).

Heye continued to expand, purchasing Becker's plant at Stradthagen in 1855 and the Steinkrug glass works near Hannover in 1859. By at least the 1860s, the company was exporting bottles to markets as far away as South America. Heye's son, Ferdinand, continued his father's expansion by building a new factory at Nienburg (ca. 30 miles southeast of Bremen) in 1873. He followed this with the purchase of a glass factory at Annahütte, Niederlausitz. (Heye-Glas 1999:18-24).

In 1864, Ferdinand Heye founded the "Ferd. Heye, Glass Factory, Gerresheim near Düsseldorf" (Gerresheimer 2007), and the factory began production a year later (Answer.com 2007). The plant became the Gerresheimer Glashuettenwerk, Gerresheim, Germany. In 1875, Ferdinand

Heye was instrumental in convincing the mineral water industry in Germany to standardize their bottles, allowing the reuse of any kind of mineral water container. The plant installed continuous tanks in 1881 (Answer.com 2007).

In the early 1870s, the German wine industry converted from pitchers and casks to glass containers. About the same time, mineral water bottlers switched from ceramic to glass containers. A decade later, with the use of Pasteurization to preserve lager beer, breweries began to use glass bottles as well. This increased use of glass products led to a major impetus toward export during the 1880s (Answer.com 2007). Gerresheimer exported 20% of its line in the 1860s and 1870s, but increased that to 50% during the following two decades. One of its importers was the Abrason-Heunisch Glass Co. Many wine, mineral water, and "non-handled chestnut flasks" found in the American West were apparently made by Gerresheimer and imported by Abramson-Heunisch (Quinn 1998:x-ix).¹

Heye installed the first semiautomatic machine at Nienburg in 1901, followed by Owens automatic machines in 1906.² Fritz Heye, grandson of the founder, took control of the company in 1916. Fritz installed the first Lynch feeders in 1928 but closed the Nienburg factory in 1930 and moved the machinery to Obernkirchen by 1934. Production was halted at the end of World War II (April 1945) and resumed in July 1946 (Heye-Glas 1999:24-28, 92).

By 1910, there were 18 Owens machines in Europe, 13 of them in Germany (*National Glass Review* 1910:1): Gerresheim - 2; Zinzig - 6; Hamburg - 1; Nienburg - 1; Dresden - 1; Straulau - 1; Rintein - 1.

Meanwhile, at the Gerresheimer factory, all bottles were made by the Owens machine by 1925. The company continued to expand, locating factories closer to the wine-making and brewery areas. As with the rest of Germany, production halted at the end of World War II, but Gerresheimer remodeled in 1946 and resumed production with many new gob-feeder machines. By 1958, the older Owens machines were all replaced with "new rotating R7-machines and IS-multiple-section-machines."

Owens-Illinois acquired control of Gerresheimer in 1959 (Answer.com 2007).

Toulouse (1971:239) noted that "there are two groups remaining from the Heye organization" in 1971. One was the H. Heye Glasfabrik "Schauenstein" K.G. at Hannover; the other was the Aktien-Gesellschaft der Gerresheimer Glashuttewerke with factories at six locations. Heye-Glas first produced non-returnable beer bottles in 1965 and light-weight beer bottles – nicknamed "snobby" – in 1968 (Heye-Glas 1999:38, 42). At some point between the end of World War II and the 1970s, the company became known as Heye-Glas and later as Heye International. The company acquired another plant at Niederlausitz in 1984 (Heye-Glas 1999:47, 92).

In 1985, the H. Heye Glasfabrik had two factories, one at Oberbirnkirchen, the other at Gerresheimer, both in Germany. The plants made "one-way & returnable beer & beverage, food, juice, liquor, milk, mineral water, wine, chemical & pharmaceutical containers in flint, green & amber glass. Specialists in narrow neck press & blow process, waste heat recovery in furnaces, designing & building of complete glass plants" (Perrine 1985:26).

Heye-Glas continued its expansion with the founding of Heye America in 1987 with its headquarters in Marion, Indiana. This was followed by the opening of Heye-Polska in Poznan, Poland, in 1992 and the Moerdijk, Netherlands, factory in 1996. By 1999, the firm operated ten plants in Germany, Portugal, the Netherlands, Poland, and the United States (Heye-Glas 1999:50, 55, 93). The company became a member of Ardagh Glass GmbH on January 1, 2003 (Heye International 2005).

Bottles and Marks

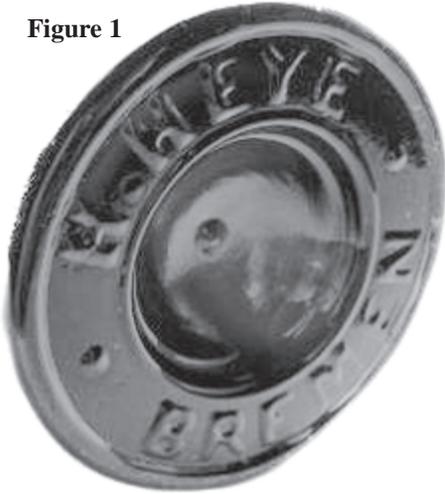
H

Toulouse (1971:238) noted that a simple "H" mark was used by Heye "possibly as early as 1880, until 1936. Currently, we have found no confirmation for this mark from any other source.

H. HEYE • / BREMEN • (ca. 1840s-1870s)

An eBay photo showed the H. HEYE

Figure 1



basemark in an arch with BREMEN in an inverted arch in a Rickett's type plate mold (**Figure 1**). The center of the base was a stepped kick-up with a small mamelon (or dot) in the center. On this mark, the place and name were separated by embossed dots. Parks and Pasivantis (1978:97) illustrated this base from a Civil War context and showed the cylindrical bottle with a two-part finish that is in keeping with that time period. From the photo, the bottle appears to have been blown into a dip mold, again, quite in keeping with the period.

This type of base was never (to our knowledge) found on beer bottles. These and the other bottles with kick-ups described below were likely used for wine, liquor or bitters. Photos from David Bush (personal communication 10/16/2007) of a bottle from the Johnson's Island Civil War Prison and our observation of a base at the California State Parks type collection show that the mark (with a slightly different kick-up) was on the base of olive-green "wine" bottles, typical of the 1840-1860s period, possibly extending into the early 1870s (**Figures 2 and 3**). Johnson's Island was only in use between 1862 and 1865 (Bush 2007:68), and the Heye bottle was excavated from Feature 41, dated at 1863. This creates a tight context for that specific bottle. Although the name is embossed on

Figure 2

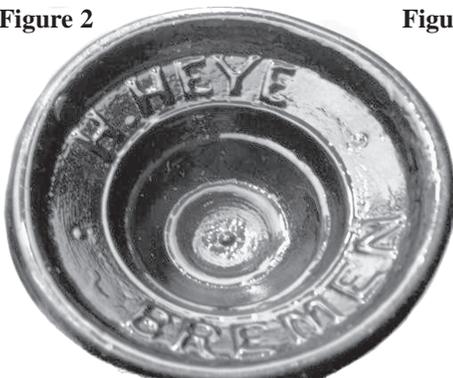


Figure 3



Figure 4

bottles for export, the Bremen facility may have been a sales point rather than a glass factory.

BREMEN • / H. HEYE • (ca. 1840s-1870s)

Jones (1968:11) illustrated this mark as "Ft. Union pre-1891." BREMEN was embossed on the base in an arch at the top, and HEYE was in an inverted arch at the bottom. Like the above example, the two words were separated by embossed dots. All of the bottles marked with both "H. HEYE" and "BREMEN" along with a kick up were probably made during the same period, ca. 1840s to 1870s.

BREMEN • H. HEYE • (ca. 1840s-1870s)

Wilson (1981:118) illustrated this slight variation with BREMEN • H. HEYE • in a continuous circle around the edge of the base. Although the base is shown with a dot in the center, the drawing does not contain the lines that Wilson used to indicate plate molds and stepped kick-ups. Wilson found only the base, so there is no description of the bottle or the finish.

BREMEN / H. HEYE / HAMBURG (ca. 1880-ca. 1894)

This marking has been found on export beer bottle bases made from a distinctive shade of darker green from that of aqua or other light green exports we have examined. The bases were embossed with "BREMEN (arch) / H. HEYE (horizontal across center) / HAMBURG (inverted arch)" (**Figure 4**). The mark appears to be in a plate mold in the center of the base. However, there are no apparent mold lines leading from the plate (as in a post bottom), and the overall sheen and dimples in photos suggest the bottles were made in dip molds.

According to Toulouse (1971:238-239), the mark was used by the Hermann Heye Glasfabrik, Bremen, Germany. He dated the mark "possibly as early as 1880, until 1936." The mark could have been used

much earlier than the date stated by Toulouse, although it would not have appeared on beer bottles in the U.S. prior to 1872, when the Pasteurization of beer was developed by Anheuser Busch. There was probably a notable time lag before Heye could have entered the American market, so the ca. 1880 date is reasonable. However, even though the business is still in operation, the mark was likely not used later than ca. 1894, at least in U.S. contexts. Both Hamburg and Bremen were most likely trade points for export rather than factories. Why Heye chose those cities for bottlemarks is currently unknown.

Lockhart and Olszewski (1994:38-39) found bases with this mark in San Elizario, Texas (ca. 1880-ca. 1886). Lockhart (2006) found several bases embossed with this mark at Fort Stanton, New Mexico, in ca. 1881-1896 contexts. Jones (1968:11) also showed this mark as "Ft. Union pre-1891." Herskovitz (1978:8) found 129 of these bases at Fort Bowie, Arizona, in a context extending to 1894.

GLASFABR. H. HEYE NIENBURG

This mark was reported on an eBay auction. Unfortunately, the accompanying photo was blurred. The mark was found on a Selters bottle (i.e., mineral water) from Germany.

GLASS WORKS/H. HEYE/HAMBURG (1880s-1890s)

David Whitten noted that this mark "is confirmed" on a bottle base and probably dates between the 1880s and the 1890s, although we have yet to see an example.

HEYE (ca. 1940s-1960s)

Toulouse (1971:238) noted that the "HEYE" mark was used by Heye "possibly as early as 1880, until 1936." He stated that the mark was "known on a machine-made fruit jar, probably dated just before World War II." Such jars were produced by Heye-Glass on press-and-blow automatic machines during the post-World War II period, i.e., shortly after 1940 (Heye-Glas 1999:32), although we have been unable to trace how recently production was discontinued. We have found no evidence for the Toulouse assertion that the mark was used earlier than ca. 1940. Also see "clover" design below.

"Clover" design (ca. 1965-present)

This is our term for the logo; we

have not found it named in the Heye or any other literature. The design is formed with a base extending upward into three “petals” with rounded ends. This design was used in conjunction with the HEYE mark described above and seems to be connected to Heye-Glas. Toulouse (1971:579) noted that the design alone was used by the Obernkirchen and Hannover plants between 1965 and 1969, and the design with “HEYE” at the base was used on “preserving jars” in 1965 (Figures 5 and 6). Although not shown with the word “HEYE,” the “clover” design was still used by Heye factories in Germersheim and Obernkirchen in 1982 and 1996 (Emhart 1982:25; 1996:16). The lid also appears in current ads.



Figure 5



Figure 6

Turn-Mold Bottles

When the Bottle Research Group³ examined the Fort Bowie collection at the Western Archaeological and Conservation Center, Tucson, Arizona, in January 2007, we discovered an export beer bottle with

both turn-mold characteristics and the BREMEN / H. HEYE / HAMBURG mark on the base. According to Toulouse (1971:153), bottles of this sort were created by using the turn-mold process to create the bottle, then re-inserting it into the mold to set the basemark into the glass. Other turn-mold bottles with no basemarks have been found within the same context and may also have been made by Heye. Ayres and his associates (1980:30) noted that one bottle in their study was formed by the turn-mold process with an embossed base, but they did not identify the manufacturer. See Lockhart (2007) for a discussion about turn molds.

Discussion and Conclusion

The history of H. Heye Glasfabrik offers scant help in dating its marks on export beer bottles. It is certain that beer bottles made by the plant were used in the American Southwest at some point between the 1870s and 1896 and that other cylindrical bottles, possibly for wine or whiskey, were used from the 1840s to the 1870s. Beer bottles made by Heye were almost certainly in use by the 1880-1886 period although how long after that is undetermined. The Toulouse end date of 1936 is way too late for beer bottles. It is highly likely that export beer bottles with the HAMBURG and BREMEN designations were produced between 1880 and ca. 1896. Those marked only with BREMEN were likely made during the 1840s to 1870s, although their use may extend into the 1880s.

The colorless, machine-made jars were certainly manufactured after World War II, although their approximate date of use may only be conjectured at the 1940s to 1960s period. The “clover” mark is likely still in use, although it is unlikely on bottles found in U.S. contexts.

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Footnotes:

¹ Answer.com (2007) stated that Gerresheimer did not begin exporting bottles until 1882. Although this disagrees with Quinn's claim that the plant exported bottles in the 1860s, we have no way to determine which source is correct. It is certain that bottles marked "HEYE" were imported into the U.S. by at least the early 1860s, although most of those are also marked "BREMEN."

² Answer.com (2007) placed the date of the first Owens machine at the Gerresheimer plant in 1908 and claimed it was the first in Europe.

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