

Armstrong Cork Co.

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It has been fairly common in glass industry history for one firm to specialize in closures, while another concentrated on producing containers. The Armstrong Cork Co. began as a closure manufacturer, added glass production, and eventually diversified into floors, ceilings, and other pursuits that were unrelated to its early production. The firm continues to operate in 2013. This study, however, is only concerned with the company's container-related periods.

History

Armstrong Cork Co., Pittsburgh (1860-present)

Cork is the bark of the Cork Oak, found only in southwestern Europe and northwestern Africa. Thus, all U.S. cork supplies have been (and are) imported. Thomas Armstrong and John P. Glass opened a shop at Pittsburgh in 1860. The pair carved cork stoppers by hand, mostly to fit glass containers and initially delivered their products in a wheelbarrow. As early as 1864, the partners branded each cork with their distinctive Circle-A logo (Wikipedia 2013).

By 1891, when the firm incorporated, Armstrong Cork was the largest cork supplier in the world. Armstrong began the manufacture of other closures in 1900 and opened a new linoleum factory at Lancaster, Pennsylvania, in 1916 to begin its diversification. The firm entered the molded-plastic cap field in 1925 (Toulouse 1971:24; Wikipedia 2013).

Armstrong Cork Co. (Glass Division), Millville, New Jersey (1938-1969)

The Armstrong Cork Co. entered the glass-making business when it acquired Whitall Tatum & Co. (Millville, New Jersey) on June 20, 1938, and the Hart Glass Mfg. Co. (Dunkirk, Indiana) on December 21 of the same year with the intent to produce complete packages, bottles and closures together (*Glass Industry* 1939:20; *Glass Packer* 1939:52). The Glass Factory Year Book for 1939 listed five continuous tanks for the Armstrong Cork Co., Whitall Tatum Division at Millville, New Jersey, making "prescriptions, patent, proprietary, vials, toilets, packers and

preservers, beverages, liquors, specialties.” The Hart Glass Mfg. Co. was listed separately and had no noted connection with Armstrong. Hart made “packers and preservers ware, prescription, proprietary, soft drinks and beverages, liquor wares, condiment and fruit juices. Bottle specialties” at two continuous tanks with 14 machines (*American Glass Review* 1939:83, 87).

The 1940 listing included both the Whitall Tatum Division and the Hart Division with five continuous tanks at Millville and two at Dunkirk, with the same listing of products as the earlier Millville enumeration. The listing remained the same until at least 1944, our last available access to the reviews (*American Glass Review* 1940:91; 1944:97-98). Armstrong decided that the operation of two plants in Millville was inefficient. Consequently, in 1940-41 they expanded and modernized the lower plant and dismantled the upper one (*Glass Industry* 1941). For a long list of Armstrong glass division officers, see Toulouse (1971:25).

One of Armstrong’s 1940 beer bottle advertisements featured four bottle styles (Export, Stubbie, Steinie, and quart Steinie), made in “deep, rich amber (the famous amber formerly produced by Whitall Tatum).” In addition, the firm offered “the new light-weight, one-trip packie, in both amber and clear flint.” Of course, every bottle could be topped by Armstrong’s “complete line of high-quality crowns to give your beer or ale maximum flavor protection” (Armstrong Cork Co. 1940:7).

The Hart and Whitall Tatum Divisions consolidated in 1957, when the combined operation used seven continuous tanks with 41 machines. In 1961, Dunkirk added another tank and four additional machines. In 1967, the firm made its final acquisition – a single-tank factory at Waxahachie, Texas – specifically to make beer bottles – and built another tank at Dunkirk in 1968 (Toulouse 1971:25).

Citing the March 1969 issue of *Glass Times*, *Dunkirk Plant*, an internal publication for the glass plant in Dunkirk, Indiana, Cole (2003) recorded that all six plants of the Armstrong Cork Co., Glass Division, were sold to the Kerr Glass Corp. on April 1, 1969. With that sale, Armstrong exited the business of glass manufacture (Griffenhagen and Bogard 1999:97; Toulouse 1971:24-25). In one of his noted discontinuities, Toulouse (1971:24-25, 544) stated that Armstrong Cork sold in both 1968 and 1969 on two facing pages and repeated the error date later.

Containers and Marks

Although we do not have a large sample of Armstrong base photos, the firm seems to have continued where Whitall Tatum left off – primarily manufacturing prescription and liquor containers. Most of the bottles seem to have been generic, although the factory made some Lysol bottles. All Armstrong bottles were made on Individual Section (IS) machines (Foster-Forbes 1987).

Circle A (1939-1969)

Along with branding its corks with the Circle-A logo, Armstrong Cork Co. used the same mark on glass products from 1939 to 1969. Since Armstrong almost certainly honored the existing contracts at the Whitall Tatum plants, it is unlikely that the factories made any glass embossed with its logo in 1938. Any containers made during the first year or so probably still exhibited the Whitall Tatum and Hart logos.

Although the Circle-A logo is the better known, Armstrong also registered a Circle B mark on September 5, 1906. However, Circle-B was apparently not used on bottles (Toulouse 1971:24-25, 544). However, at least two Circle B marks *have* been used on glass containers – by the J.T. Baker Chemical Co. and the Brockway Glass Co. (Toulouse 1971:24, 59).

The Armstrong Cork Co. first registered the Circle A trademark in April 1889 as No. 16,251. The firm registered the same logo again (No. 55,475) on August 14, 1906, although no first-use date was specified in the application. The logo was again trademarked on April 16, 1940 (No. 377,025). According to Armstrong, it had been used since January 10, 1939 (Creswick 1987:155). Although not specifically mentioned, we suspect that the final trademark was registered for use on glass. Both Scholes (1941:129) and Berge (1980:83) showed the Circle-A mark and W/T in an inverted triangle as used together in 1941 and 1964. Jones (1966:15) similarly showed the Circle A mark as belonging to Armstrong Cork.

Giarde (1980:9) discussed the possible use of the Circle-A mark on dairy containers. He noted, “While the A in a circle mark remains unconfirmed on milk bottles, the wide variety of containers made by Armstrong suggests that dairy containers will be found bearing the mark.”

When we examined the 120-box, California State Park collection of milk bottles, we did not find a single bottle with the Circle-A mark – despite the presence of other eastern logos. Unfortunately, we have not had the opportunity to examine comparable eastern collections.



Figure 1 – Circle-A logo, American Glass Works, Richmond (University of Wyoming collection)

Toulouse (1971:23) also listed the mark as used by the American Glass Works, Richmond, Virginia, and Paden City, West



Figure 2 – Circle-A logo, Armstrong (California State Parks collection)

Virginia. Although he dated the mark ca. 1908 to 1935 (actually 1907), Toulouse added some qualifiers: “This mark has been claimed, but verification is lacking; if true, would apply to hand-made and to machine-made bottles[.] Lacked three years of conflict with Armstrong” (Figure 1). The Toulouse calculation is correct – the American Glass Works closed three years prior to Armstrong Cork’s entry into glass manufacture. Thus, there was no conflict with both companies using the same Circle-A logo. However, the American Glass Works stopped using the logo very early – probably by ca. 1913; therefore, there was even more of a gap between the use of the logos by the two glass houses. See the American Glass Works section for more information.

Armstrong apparently used a two-digit date code on most container bases, probably from the beginning – although some bottles with all three variations of the mark. We have recorded codes of 40-56 (1940-1956). The codes may be above, below, or to the right of the logo. The bases also contain a one- or two-digit mold code, usually preceded by

a dot or period (Figure 2). As mentioned above, at least some Lysol bottles were made by Armstrong (Figures 3 & 4).



Figure 4 – Circle-A logo on Lysol base

We have noted three variations of Circle-A logo – probably corresponding to each of the three plants: 1) Millville, New Jersey, Upper (formerly Whitall Tatum); 2) Millville Lower (formerly Whitall Tatum); and 3) Dunkirk, Indiana, (formerly Hart



Figure 3 – Lysol bottle (eBay)

Glass Mfg. Co.). Testing the hypothesis proved easy. One of the logos was used consistently with the “12” federal liquor code, formerly the property of Whitall Tatum. Although we have not discovered the number used by Hart, another logo consistently accompanied the number “70” on bases, and this probably was used by Hart. The third logo was not found on any liquor containers in our sample. Each of these is discussed separately below.

Circle-A

This logo consisted of the Circle-A only – without the addition of an underline or any letters (as described in the descriptions of the other marks below). As explained below, the other two variations of the logo were each accompanied by a number indicating a federal code for liquor containers, one assigned to one of the Millville plants, the other to the factory at Dunkirk. That leaves the Circle-A mark to the other Millville plant (see Figures 2 & 3). We suggest that the Circle-A logo was used by the upper plant, the one shut down in 1940-41. An nurser produced by Armstrong had a base embossed “Armstrong (arch) / PAT. D-152,926 / Nurser” (Figures 5 & 6).



Figure 5 – Nurser (eBay)



Figure 6 – Nurser base (eBay)

This assignment may sound strange considering that we have examples dating from 1942 to 1960 in our sample, but, we suspect that the molds were transferred to the lower Millville factory in 1941, and both marks were used there interchangeably until the sale of the firm to Kerr in 1969.

Circle-A[rmstrong]

The logo consisted of the Circle-A mark with “rmstrong” (the rest of the name) extending to the right. The circle may have been added as an afterthought. In our sample, the “r” in the rest of the word was in the same position it would have occupied without the circle. The edge of the circle was superimposed over the upright line of the “r” – an odd position if the circle had been intended from the beginning.

Although this is speculation, the original logo could have been the Armstrong name, then someone suggested that the same Circle-A mark used on corks should be used on bottles. At that point, someone may have suggested using different forms of the logo to identify the three factories.

We have recorded this logo on prescription bottles (Figure 7), nursers, packers' ware, and liquor bottles – the latter generally accompanied by “MADE IN U.S.A.” (Figure 8). It is possible that the addition of the full name and location of manufacture indicated bottles intended for export. Other firms (e.g., Illinois-Pacific Glass Co.) used the factory/company names and the “U.S.A.” designation on exported bottles and jars – but rarely on domestic products.



Figure 7 – Circle-A “rmstrong” on prescription base

As explained more fully in the section on Anchor Hocking, the government issued numbers to glass houses that resumed the manufacture of liquor bottles at the end of Prohibition in 1934. These numbers were embossed on liquor bottles until 1968, when the law was rescinded. The Whitall Tatum Co. had captured No. 12, and Armstrong inherited that number, when it bought Whitall Tatum in 1938 (see Figure 8).

The consistent use of No. 12 with the Circle-A-rmstrong logo is a strong indication that the mark was used by the former Whitall Tatum factory at Millville, New Jersey. Our sample included date codes between 1945 and 1964 on both colorless and amber containers. These *may* have been made at the lower factory during the entire tenure of the plants as a part of Armstrong – 1938-1969.



Figure 8 – Circle-A “Armstrong” logo and federal liquor permit No. 12 (eBay)

Underlined Circle-A

This logo consisted of the Circle-A mark with a notable underline (Figure 9). As with the others, it was found on both amber and colorless glass, and it occurred on liquor containers – but, these lacked the “MADE IN U.S.A.” found on the ones with the Circle-A “rmstrong” marks. While we had a solid connection between the number “12” and Whitall Tatum, we had never discovered the liquor code for the Hart Glass Mfg. Co. at Dunkrik. However, the number “70”

regularly appeared with the underlined logo and was never associated with Whitall Tatum, so it almost certainly belonged to Hart prior to the 1938 sale. Date codes in our sample ranged from 1938 to 1961, and the logo likely continued in use until the sale to Kerr in 1969.



Figure 9 – Underlined Circle-A logo and federal permit No. 70 (Tucson Urban Renewal)

W/T in an inverted triangle (ca. 1922-1969)

The Whitall Tatum Co. used the former Whitall Tatum mark on medicinal and other bottles, mostly generic styles, from ca. 1922 until the firm sold to the Armstrong Cork Co. in 1938 (Figure 10). Several sources – including McDougald & McDougald (1990:133, 138), Giarde (1980:136), and Griffenhagen and Bogard (1999:40) – dated the logo from 1924 to 1938, although Lockhart et al. (2006) presented evidence for a use two years earlier.

As noted above, however, it appears that the Armstrong Cork Co. continued to use the W/T logo. Scholes (1941:129) showed both the W/T inverted triangle mark and Circle-A as used by Armstrong Cork Co. in 1941. Berge (1980:83) illustrated a 1964 chart from Owens-Illinois showing both logos in use in 1964. The McDougalds also noted that “eight years [from the date of the sale to Armstrong Cork] passed before the venerable Whitall Tatum name began to be replaced by Armstrong embossings” on insulators (MdDougald & McDougald 1990:138). Eight years after 1938 would be 1946. There is no evidence that Kerr Glass continued to use any of the earlier Armstrong or Whitall Tatum logos, although there was probably about a year overlap, when Kerr continued to fill existing Armstrong contracts.



Figure 10 – Former Whitall Tatum logo

The longer time frame is questioned, however, by a 1987 Foster-Forbes Glass Co. Pamphlet. The cover illustrated several logos that were used by the Millville plant – including the W/T-in-an-inverted-triangle logo (Figure 11). The date range for the W/T mark – 1838-1938 – is *very* incorrect as to the end date, but the beginning date corresponds to the sale of the plant to Armstrong Cork. The end date, however, may be a typographical error for 1948 – just two years later than the 1946 date posited by the MacDougalds.

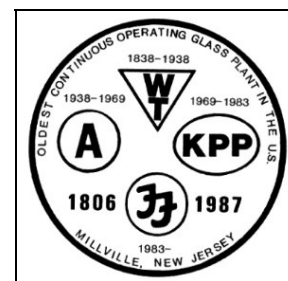


Figure 11 – Cover of the 1987 Foster-Forbes pamphlet

The most likely explanation for this continued use of the older firm's logos is that Armstrong Cork used up the old molds without altering the marks – especially on insulators. The use of the older logos was a common practice while filling existing orders from the former company, usually lasting for a year or two after the purchase of the factory or factories. Often the new buyer would keep the old molds, sometimes altering the logos, sometimes just using the old ones. The latter may have been the case with Armstrong Cork. If so, the insulator molds may have lasted for about eight years, but the bottle molds likely wore out earlier. The existence of the W/T logo on the 1964 list was probably based on old information. Unfortunately, there is virtually no way to distinguish whether a bottle with the W/T logo was manufactured by Whitall Tatum or made by Armstrong Cork.

Logos from the Hart Glass Mfg. Co.

Although Armstrong Cork continued to use the Whitall Tatum logo, there is no indication that the firm used either the “H” or “H-in-a-heart” marks that have been attributed to the Hart Glass Mfg. Co. The Toulouse assignation of the lone “H” to Hart Glass (Toulouse 1971:232) is shaky at best. Toulouse (1971:231) also assigned a lone “H” to the Holt Glass Works, West Berkeley, California. The 1900 *Era Blue Book* (Haynes & Co. 1900) listed the W. H. Hamilton Co., 6th & Wood Streets, Pittsburgh, Pennsylvania, as making “prescription ware, etc.” with an “H” logo. Caniff (2001:6-7), stated that the “H” was used on jars by the Hazel Glass Co. (Washington, Pennsylvania). The single “H” was also used by other glass houses. Hart's other logo – H in a heart – is so uncommon that we have never found an example to photograph for the *Encyclopedia*. The logo was probably used, although it seems unlikely that its use was continued by the Armstrong Cork Co.

Discussion and Conclusions

It is clear that the Armstrong Cork Co. continued to use the Triangle W/T logo on insulators and probably on some bottles from its acquisition of the Whitall Tatum factories in 1938 to an undisclosed time, probably no later than ca. 1948. The new mark – actually the older Circle-A logo branded on corks – had three variations. The Circle-A with no additions likely represented the former Whitall Tatum upper plant, while the Circle-A “rmstrong” mark was probably used by the lower factory. When the upper plant closed in 1940, its molds likely went

to the lower factory, continuing to be use with no alterations. The final variation was an underlined Circle-A, used by the former Hart Glass Mfg. Co. plant. The vast majority of these logos were accompanied by two-digit date codes, making dating easy. The date codes ranged throughout the tenure of the Armstrong Cork Co.

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Originally published April 6, 2013; last updated October 24, 2021

