

Cannington, Shaw & Co.

Bill Lockhart, Beau Schreiver, Bill Lindsey, and Carol Serr

Beer bottles and fruit jars with variations of the CS&Co mark are known from historical towns in the American West. Both glass color and bottle style indicated that these bottles were of British Origin (see discussion at end).

Cannington, Shaw & Co., St. Helens, Lancashire, England (1875-1913)

Edward Cannington entered the glass business in the firm of Cannington, Reynolds & Fry at Bristol, England, sometime prior to 1872. However, he sold his interest in the firm in 1872 and began glass manufacture in Liverpool. Cannington joined with John Shaw in 1875 to form the Sherdley Glass Works under the management of Cannington, Shaw & Co. (Figures 1 & 2). By 1889, the Sherdley Glass Works employed 870 workers (Toulouse 1971:147-150; von Mechow 2014; Wainwright 2013).

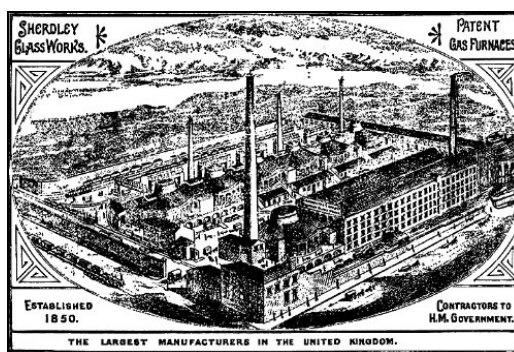


Figure 1 – Sherdley Glass Works (Wainwright 2013)

According to Joanna Hayward (Collections and Access Manager, The World of Glass, St. Helens, England), “Cannington Shaw became a limited company in 1892. The partners were John Cannington, Edwin Cannington and John Shaw.” The reorganized firm now employed 1,188 workers. In 1895, Cannington, Shaw & Co., Ltd., was having so much of a problem with pilfering from both employees and outsiders that the firm claimed it lost about 100 dozen gross of bottles (172,800) in that year alone. The factory suffered a major fire on September 22, 1898, that destroyed a huge warehouse, holding 430,000 bottles (von Mechow 2014; Wainwright 2013).



Figure 2 – Cannington Shaw steam wagon (Wainwright 2013)

The company began using an Ashley machine in 1897 and – along with Bagley & Co. – purchased the assets of the Ashley Bottle Co. on March 22, 1899, and divided the existing machines between the two firms (see below for a discussion of the Ashley machines). The company phased in Owens machines in 1908 and produced a large variety of both narrow-mouth and wide-mouth bottles. By 1898, Cannington Shaw had placed several of the machines in operation and had seven machines (type not recorded) in operation in 1907 (Turner 1938:252; 255).

Meigh (1960:4), reported when he visited the plant on July 26, 1916, that the factory “succeeded in making good bottles on Ashley machines after adding improvements of their own.” Cannington, Shaw & Co. was one of six companies that formed the United Glass Bottle Mfg. Co., Ltd., on March 31, 1913 (von Mechow 2014; Wainwright 2013). See the section on the United Glass Bottle glass houses for more details on the later firm.

Containers and Marks

Cannington, Shaw & Co. used a variety of marks to identify its products.

CANNINGTON SHAW & CO. S^T HELENS (1875-1892)

Wainwright (2013) illustrated a glass lid embossed “CANNINGTON SHAW & CO. (arch) / S^T HELENS (inverted arch)” (Figure 3). The lid apparently was glued onto the top of a cork. This was likely one of the early closure styles, probably used during the early part of the 1875-1892 period.



Figure 3 – Cannington Shaw & Co. mark (Wainwright 2013)

CS in a diamond (1875-1892)

Boow (1991:177) identified “CS” in a squared diamond as a mark used by Cannington Shaw & Co. prior to 1913. Toulouse (1971:147) also illustrated the logo but had no idea who used it (Figure 4). While Boow was discussing an Australian example, the Toulouse reference shows that at least one bottle with the Diamond-CS marking found its way to the U.S. If Boow

were correct, this should fit temporally between the full name (above) and the initials (below).

C.S&C^o (1875-1892)

Toulouse (1971:147) noted that bottles with the “C.S&C^o” logo in an inverted arch “are not rare in the ghost towns of western United States, so the business in foodstuffs generally packed in them must have been good. The bottles, too, had to be good to withstand the eighty to ninety years in ghost town dumps.” He dated the mark “circa 1875 to 1913.”

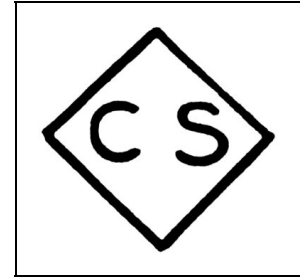


Figure 4 – CS in diamond
(Toulouse 1971:47)

Herskovitz (1978:8) noted a single example of this mark on what he identified as a beer bottle base. The mark was accompanied by the number 408. He identified the logo as belonging to Cannington Shaw & Co., Lancashire, England, and dated it at 1875-1913 (following Toulouse). The Herskovitz bottles came from Fort Bowie, occupied by the military from 1863 to 1894.

Jones (1966:7; 1968:15) showed the mark in an inverted arch at the bottom of the bottle’s base with a small dot in the center and 179 in an arch at the top of the base. Unlike Herskovitz, she showed a capital “O” in “CO.” She attributed the mark to Cannington and Shaw (note slight differences in spelling and composition of the name) of “St. Helena, [sic]” England, but noted an 1880-1926 date range in her earlier research and, in her later understanding, that the company “started operating circa 1830 – changed to mechanical bottles 1919 and merged with United Glass Bottles in 1930.” All of these dates are incorrect.

The very few examples we have observed (either personally or on eBay) have had the mark in an inverted arch with a three- or four-digit number at the top in an arch and a dot or mamelon in the center (Figure 5). There was always a period after the “C” but not after the “S” – and the “o” in “C^o” in our observation was superscript but not underlined. Bottles without the “LD” appear to be scarce. We would expect all bottles with

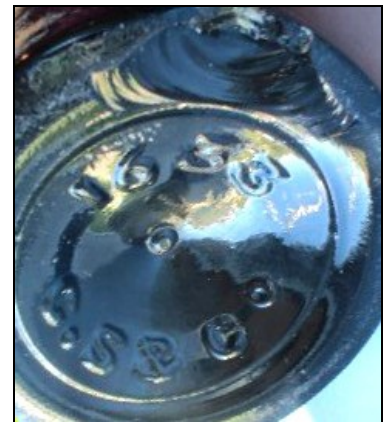


Figure 5 – C.S&C^o basemark (eBay)

this mark to be mouth blown. Unfortunately, our sources for these bottles are few. One photo we have is of the lower half of a blackglass, cylindrical bottle that probably held English beer or ale. Other photos are of round, aqua bases.

C.S&C^oL^D (1892-1913)

Jones (1965:[23]), Ayres et al. (1980), Creswick (1987a:38), Roller (1983:98), and Mobley (2004) illustrated or described the later mark in slight variations. These were all noted or illustrated on bases and all included a three- or four-digit number at the top. Some of the researchers observed that each bottle had a large dot or mamelon in the center of the base. Mobley called the color a “soft deep sea green.” Although date ranges varied slightly, all generally stated the range (incorrectly) for the entire time the company was in business.



Figure 6 – C.S&C^oL^D basemark
(Tucson Urban Renewal collection)



Figure 7 – C.S&C^oL^D basemark with
4-digit number (eBay)

Our observations of the logo show that the “o” “C^o” was always an underlined superscript. The “LD,” however, was embossed in two formats, always with a capital “D.” The first had the “D” as an underlined superscript (Figures 6 & 7); the second showed the “D” nestled in the crook of the “L” (Figure 8). We have seen a single example with the “C.S&C^oL^D” mark embossed along the heel. It is fairly clear that the three- or four-digit number at the top of the basemarks is a catalog or model number.

Since the company became a limited partnership in 1892, some of the “LD” marks should appear on mouth-blown bottles. The dot or mamelon was actually used on wide-mouth bottles, while narrow-mouth ware (e.g., beer or whiskey bottles) had none.



Figure 8 – C.S&C^oL^D with “D” in
the crook of the “L” (eBay)

Our only photo of what was apparently a later machine-made bottle showed a cup-bottom base – as opposed to the post-bottom bases used on the mouth-blown bottles. The mark was in

the “C.S&C_L” format (rather than the “D” nestled in the crook of the “L”), which suggests that this was the newer configuration. In addition to the four-digit number at the top, this example had a larger “A1” in the center of the base (Figure 9).



Figure 9 – Later machine-made base (eBay)

Unfortunately, most of our sample comes from photographs, and most of those do not show detail of the finish – thereby *not* allowing us to determine whether the bottle was machine-made or not. One characteristic of the Ashley machine (see the Ashley Machine section below) is the lack of a typical machine scar on the base. As noted in the Discussion and Conclusions section, this has a strong dating potential.

The Ashley Semiautomatic Bottle Machine

An all but forgotten chapter in bottle/jar machinery led to the eventual invention of a practical device. According to Gosney (2010):

In 1866 Josiah Arnall, the postmaster at Ferrybridge [England], submitted an idea to Edgar Brefitt for the mechanical production of glass bottles, but it was either too crude or revolutionary to prove convincing. Some twenty years later, H.M. Ashley, the manager of the iron foundry in Ferrybridge, went to live with Arnall and together they patented the first mechanical device, known as the ‘plank machine’ on July 2 1886.

On December 17, 1887, a reporter for the *Leeds Mercury* left his observations about his introduction to the Ashley machines in operation at the factory of Sykes & McVay at Castleford:

Another familiar land-mark is going. The Glass Bottle Trade is in process of being melted down into new parisons without Blow pipes and Blowers, and instead of 5 men being necessary to evolve an imperial receptacle for beer or aerated water it almost looks as if 5 innocently occupied adults might discover pastime in watching the conjoint labours of a machine and a youth in placing

bottles at the service of good liquor as fast as they can be counted. Never since the days of the Pharaohs has anything so clever in glass-making been devised, nor anything so simple. It has remained for a Yorkshireman, Mr. H.M. Ashley, of Ferrybridge, to revolutionise the trade (Hodkin1953:28N).

Sykes & McVay installed the first Ashely machine in their Castleford factory in 1887. Because of the success of the machine the owners renamed the firm as the Ashley Bottle Co. Despite the *Mercury* reporter's comments, seven men were required to operate the original Ashley machine. Because the early machinery was attached to a wooden board, the machine was affectionately called the Plank machine. A new version appeared in 1889 and was called the Table or Pillar machine due to the way it was mounted. By the time the Ashley Bottle Co. ended in 1894, it had 22 machines in use. At that point, the stock of machines was purchased jointly by Bagley & Co. and Cannington, Shaw & Co. (Turner 1938:251-252).

Because these were some of the earliest in use, especially for the manufacture of jars, the machines designed by Howard Matravers Ashley of Ferrybridge, York, England, deserve some discussion. Ashley patented his first machine in England (British Patent No. 14,721) on November 13, 1886. Between 1887 and 1889, Ashley filed patents in a dozen other countries, including the United States.

Ashley initially applied for his American patent on September 26, 1887, but the patent was broken into five applications. He received Patents No. 403,023 and 403,027 on May 7, 1889. In addition, the patent office granted Ashley four more patents (403,716, 403,717, 403,718 and 433,062), respectively on May 21, 1889, and July 29, 1890. The earliest U.S. patent illustrated a wide-mouth bottle (Figure 10), but subsequent patents included narrow-mouth ware (Figure 11).

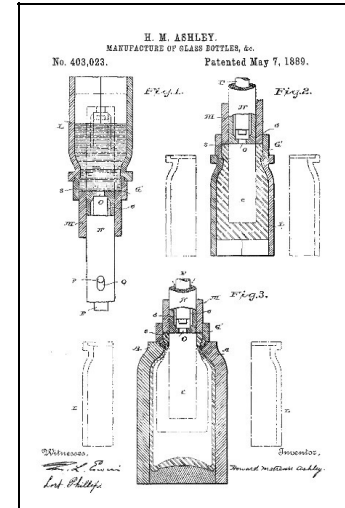


Figure 10 – Ashley's first U.S. patent, showing a wide-mouth bottle (Patent No. 403,023)

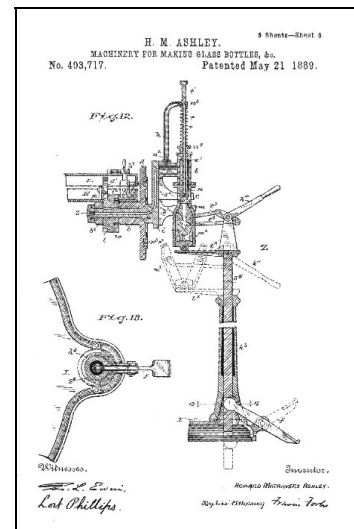


Figure 11 – Ashley patent with a narrow-mouth bottle (Patent No. 403,717)

The Ashley machine was a press-and-blow machine that operated in two stages. In the first stage, a worker dropped a gob of glass into a two-piece parison mold with a two-piece neck ring. The parison mold was upside down, so the gob of glass landed in the neck ring (Figure 12). The neck ring created the finish, and a plunger pushed upward to form the parison or blank into shape against the sides of the parison mold. Since the parison was upside down, there was no baseplate at this stage.

The parison mold was then inverted, and the mold halves opened to release the parison – now suspended by the ring mold (Figure 13). The ring and parison then moved into the upright blow mold, where a puff of compressed air blew the parison into the final shape of the bottle. The mold halves were then opened, and the completed bottle was removed (Figure 14). See English (1921) for more discussion about Ashley and his machines.

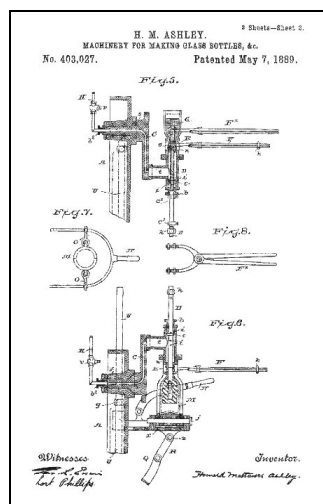


Figure 13 – Ashley's inverted blow mold (Patent No. 403,027)

as side seams that extended from the outer edge of the top of the finish to the post-bottom of the base. The base may have had concentric striations from being turned on a lathe, but it should *not* have ejection (valve) scars or typical machine scars. The machine was apparently used for the manufacture of both wide- and small-mouth bottles.

The Ashley machines thus produced bottles that had all but one of the typical characteristics of machine-made bottles. An important aspect of this description is that the exception – the lack of a machine scar – is a possible dating method. Virtually every other

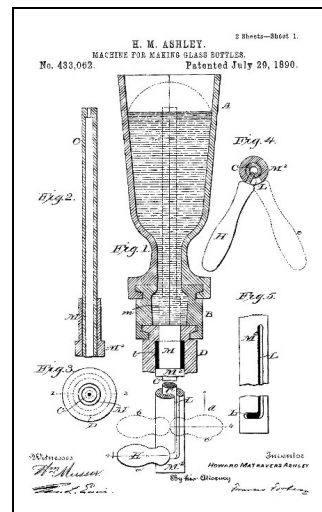


Figure 12 – Ashley's upside down parison mold (Patent No. 433,062)

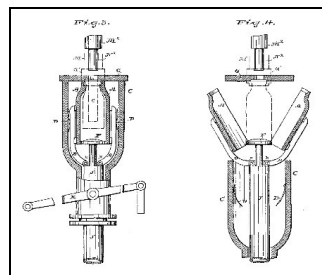


Figure 14 – Opened blow mold (Patent No. 403,716)

machine that was used to manufacture small-mouth bottles – whether semiautomatic or fully automatic – left some form of machine scar on the base. Since the Ashley machine made the parison with the finish end down, there was no baseplate on the parison mold, so there was nothing to *create* a machine scar.

Discussion and Conclusion

In summary, Cannington, Shaw & Co. began in 1875 and manufactured mouth-blown (narrow- and wide-mouth) bottles until 1892, when the firm became a limited partnership. Thus, we could expect beer bottles to have been made during the period when Fort Bowie was open (1862-1894) and during the 1880s when Toulouse placed the use of bottles with the logo at Western camps and towns. Since the firm became a limited partnership in 1892, bottles without the L^p mark may be dated 1875 to 1892, and those with the L^p designation may be dated 1892 to 1913. Machine-made containers were made as early as 1897, although some mouth-blown production probably continued, possibly until the existing molds wore out.

Future research should include a large sample of both wide- and narrow-mouth bottles to determine manufacturing characteristics. While negative characteristics (e.g., the *lack* of a machine scar) are less diagnostic than positive attributes (e.g., the distinctive, feathered Owens scar), the bases of bottles produced on the Ashley machines – in conjunction with other characteristics of the bottles – have a good potential as an identification and dating method. With Cannington, Shaw & Co. bottles, for example, mouth-blown versus machine-made characteristics, coupled with manufacturer's marks and bottle types (i.e., wide- versus narrow mouth) will almost certain give us a more concise way of dating bottles with the CS&Co logos.

One final concern for future research is the lack of Owens scars on any container with a Cannington, Shaw & Co. logo in our sample. Since most of the early Owens bottles were generic – lacking the names of retail users – many early Owens machine users failed to emboss the glass house mark on the containers. This may be the case with Cannington, Shaw & Co., although it is possible that none of the Owens machine bottles has surfaced in our sample.

It is also likely that Cannington, Shaw & Co. continued to use at least some of the older Ashley machines concurrently with the Owens devices. While Owens machines would have

been perfect for large orders of generic bottles, a major drawback to the Owens device was an inability to easily change molds. Smaller orders, especially ones that required embossing, therefore, would probably have been made on the Ashley machines.

Characteristics of English Bottles

Since we have identified these as English bottles, we have listed below some of the main characteristics. Although these are rather broad generalizations, most bottle collectors agree that English bottles have a “look” that gives away their English origin.

- A crudely (slop-over often on the outside and inside) applied one part “banded” finish is quite typical . . . and this type of bottle still had finishes applied well into the early 1900s and 1910s – many years after most American made bottles were being tooled. Other finish types are possible, but the banded type is relatively common.
- A pale greenish aqua color . . . is typical of English food bottles and many mouth-blown and machine-made English bottles from the late 19th and early 20th centuries. That color is the one that is ubiquitous to the early 20th century Gordon’s Dry Gin bottles. The same color is seen commonly on the Rose’s Lime Juice bottles.
- The glass is typically relatively even for mouth-blown bottles (probably thicker in the base a bit) but heavier than averages compared to similar American-made containers.
- Post-base mold conformations with a moderately domed base and various initials and/or numbers just within the outside edge of the domed post portion. Also frequently an embossed dot or mamelon in the center of the base.
- The “ring” around the post is often quite flat to very gently tapering inward (towards the post outside edge) – but not as steep as the domed “post” portion. This is difficult to describe but is obvious after you have observed several of these.
- No small mold air venting marks (dots), even well into the 1900s when virtually all U.S. mouth-blown bottles were being pin-hole vented.

Acknowledgments

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