Although most people are familiar with *Bottle Makers and Their Marks*, the epic volume by Julian Harrison Toulouse, there have been several other publications addressing manufacturer’s marks used by glass factories producing bottles. To the best of my knowledge, this is a complete list of books and other reliable sources that attempt to classify marks of this type. These are addressed in chronological order.

Knittle, Rhea Mansfield  

Knittle’s work is the earliest attempt at manufacturer’s mark classification I have been able to find. The marks she addressed were almost all from the 19th century. On pages 441-442, she noted 46 marks arranged in alphabetical order in three columns that listed the marks, the manufacturing company, and the city of location. Knittle made no attempt to date the marks, and, like most of these early works, she made no attempt to cite her sources.

Jones, May  

May Jones is one of the true pioneers of bottle research. Despite her isolation in the small town of Nara Vista, New Mexico, she built a network of bottle collectors that extended throughout the United States and included such noteworthy researchers as Grace Kendrick, author of *The Antique Bottle Collector*, itself a pioneer work in the field often cited by archaeologists and collectors and Julian Harrison Toulouse, reviewed later in this bibliography.

She wrote a total of nine lengthy newsletters between September 1961 and February 1968. Because she was unlettered, rural, and wrote in a rambling, colloquial style, many dismiss her work. They are foolish. Jones collected information from her vast network of collectors, wrote numerous letters to glass houses, breweries, food packagers, and others connected with glass containers. She was an inveterate reader and shared her knowledge freely.
Volume 3 of *The Bottle Trail* was her first look at manufacturer’s marks. At this point, she made no attempt to be comprehensive but illustrated a number of marks along with her comments about them including a letter from a Mr. Caroll of Anheuser Busch giving his opinions about marks that may have appeared on bottles used by that company.

Jones, May


By 1965, Jones produced her first tables of manufacturer’s marks. She included very few dates at that point but satisfied herself by attempting to match marks with factories. In this volume, she was also the first to illustrate the Owens-Illinois Glass Co. mark and correctly identify the meanings of the accompanying numbers by reproducing a six-page letter from Toulouse.

Jones, May


In Volume 6, Jones began to make a serious contribution. She produced two tables, one of older marks (mostly from beer bottles), the other of more recent logos. The newer table identified 85 marks with appropriate companies, although she added very few dates. The older table, however, included illustrations, company identification, and frequent dates for 38 marks along with several variations. Her illustrations were excellent and contained details often missing from archaeological reports and collectors’ literature. Many of the dates were remarkably close to those used by Toulouse and ones we have subsequently discovered.

Jones, May


Jones’ final effort, Volume 9, concentrated on the marks shown in her older table from Volume 6 but presented all the information she had been able to amass. In some cases, the information was quite impressive for the time. It included information I have still not found in any other source. She produced, for example, a large volume of information on the Missouri Glass Co., including city directory data that placed the factory in business continuously from 1859 to 1911. Toulouse completely ignored this information when compiling his data for the M. G. Co. mark found on beer bottles from the 1880-1900 period. After Volume 9, however, Jones faded into obscurity.
Peterson, Arthur G.

1968 *400 Trademarks on Glass*. Washington College Press, Takoma, Md.

Peterson’s small (54 pages) book is divided into three sections. The first “Trademarks on Glassware, 1860-1914” deals with marks registered for tableware. Section II “Lamps and Accessories” also deals with registered marks. The sections pertinent to this discussion are section III “Bottles and Jars” and an appendix entitled “Some Trademarks Introduced After 1914.”

Although section III is useful, it should be noted that these are trademarks used by the company rather than marks appearing on bottles and jars. For example, Peterson illustrated the upside-down bottle superimposed over a “G” used by the Graham Glass Co., Evansville, Indiana, first used in 1914. The logo appeared extensively in company literature and advertisements; however, it was never used on glass bottles. Graham used an extensive and complex method of factory identification, date codes and mold marks on the heels of its bottles but did not include the bottle-and-G mark.

The final section on trademarks after 1914 described (but did not illustrate) marks actually found on bottles along with the date each mark was first used. These dates are sometimes at odds with those found in Toulouse and are generally more accurate. Unfortunately, Peterson failed to include end dates and only listed 37 marks on pages 48-49.

Toulouse, Julian Harrison


In this book, Toulouse made an attempt to catalog all known fruit jar manufacturer’s marks. The work is impressive. He arranged the marks in alphabetical order, a style that sometimes makes it difficult to find a mark and even more arduous to locate a company. This difficulty is exacerbated by the lack of a comprehensive index. He solved that problem to a certain extent, however, by including an index of sorts entitle “Fruit-Jar Manufacturers and Their Jars.” This section lists all companies identified in the book and the marks on the jars; however, it fails to include page numbers. The main section of the book showed drawings (and occasional photographs) of marks found on fruit jars and a short description, date range, and discussion of each mark and the glass house that used it. Although he failed to include any company histories (an oversight he corrected in his second book), he included sections on Men Who Made Fruit-Jar History, Using the Jars, Dating the Fruit Jar, The Shape of the Fruit Jar, Patent Chronology, and Fruit Jar Seals. The added chapters are very useful, especially to a researcher unfamiliar with fruit jars.
Toulouse, Julian Harrison


Often considered the “bible” for manufacturer’s marks, this epic work is astounding in its breadth. By his own count, Toulouse offered information on more than 1,200 different marks found on glass bottles and jars. The book is filled with information that could only have come from a factory “insider.” Toulouse, in fact, spent his career in the glass manufacturing industry before he wrote his two books on marks for collectors.

The book is all the more remarkable when you consider that he accomplished his task without all the modern conveniences which are almost essential in compiling large databases today. He had no internet, no e-mail, and no access to eBay auctions (a great source for empirical bottle information). Often, his information about marks came from collectors writing in to organizations like that of May Jones (see above), another early pioneer in the field of marks on glass. He followed such information collecting up with calls to glass manufacturers, letters to companies, a review of the available literature, and research in city directories. The sheer volume of information he presented is daunting. The study is arranged in alphabetical order by marks. While this enables a researcher to fairly easily locate a specific mark, it separates the various company histories into choppy sections and makes tracing histories or cross checking references very difficult. It also resulted in frequent contradictions.

His work, however, has a down side. It is riddled with typographical errors, especially in the recording of dates. He is frequently a century off, for example on page 317, he dates a the mark LAMB from “1855 to 1964” – the dates are 1955 to 1964. He is often also a decade away from the correct date, such as his dating of the L-G mark from 1946 to 1954 (page 321). Other sources place the start at 1936, and empirical evidence backs the earlier decade as a more correct date. In another instance, Toulouse (page 263) had Christian Ihmsen bringing his two sons into the business in 1850, when his sources placed the date at 1860.

He frequently miscopied dates from his sources as when he stated (page 132) that W. Cunningham & Co. changed its name to Cunningham & Ihmsen in 1865 when his sources both dated the change at 1857 or when he placed Ihmsen’s retirement (page 120) at 1879 – his source said 1878. Toulouse also contradicted himself – such as when he placed the closing of Cunninghams & Co. at 1909 on page 99 but at 1907 on page 120. Since he was not specific as to his sources, we do not know which date is correct. There are so many typographic errors in the book that most of his dates should be considered approximate.

He also missed the mark (pardon the pun) by accepting the identification of marks that apparently do not exist. Our research group has been unable to find several marks that are shown
in *Bottle Makers and Their Marks* despite the use of archaeological databases, eBay, internet searches, a large array of collectors networks, and numerous books and articles. These apparently bogus marks include IG on page 264, attributed to the Illinois Glass Co., C. C. Co. (page 117), supposedly used by C. Conrad & Co. (their actual mark is much more complex and interesting), and five out of the nine marks on pages 268 and 269 that he claimed were used by the Illinois Pacific Glass Company (or Corporation or Coast Co.). We have found only four marks used by the various incarnations of Illinois Pacific, one of which he did not list.

Another major failing of the work is the general exclusion of date codes and other marks on bottle bases and heels. These often provide helpful information and show specific dates of manufacture. In his introduction, he made it clear that he considered embossed numbers to be of little or no help in identifying or dating glass.

*Bottle Makers and Their Marks* is essential in any research into manufacturer’s marks, but its information should be compared with other data as well as checking the sources used by Toulouse wherever possible.

Herskovitz, Robert M.


Herskovitz only presented a short discussion (pages 7-11) about manufacturer’s marks – and only those associated with beer bottles. However, his disagreement with some of Toulouse’s attributions and the assertion of alternative explanations makes this a worthwhile addition to a research library. On pages 8 and 9, Heskovitz offered a table of 76 marks found at Fort Bowie (1862-1894) that included the basemarks, the number of bottles or bases on which each mark was found, additional letters/numbers accompanying the marks, name of the manufacturer (where known), and date ranges. Many of his attributions, however, came from Toulouse.

Ayres, James E., William Liesenbien, Lee Fratt, and Linda Eure

1980 “Beer Bottles from the Tucson Urban Renewal Project, Tucson, AZ.” Unpublished manuscript, Arizona State Museum Archives, RG5, Sg3, Series 2, Subseries 1, Folder 220.

This unpublished manuscript is beyond a doubt the best and most comprehensive study of beer bottles that has been undertaken to date. The authors deserve a standing ovation for every aspect of the research except their failure to publish. For several years, I encouraged Lee Fratt, one of the authors, to publish the work, but I have lost touch with her in recent years. I
postponed citing the study in hopes of its publication, but it is time the work became more
publicly known.

The study is divided into three untitled sections. The first of these, 60 pages in length,
dealt with the history, variations, and manufacturing techniques pertinent to beer bottles. This
section was well presented and is a must-read for anyone researching beer bottles. The second
section (pages 1-44 plus five unnumbered pages) discussed specific manufacturing companies
and the marks they used. The authors chose to present the information alphabetically by
company instead of by mark. Although this makes it more difficult to locate a specific mark, the
company information is condensed into a single section.

The manufacturers section is very helpful in that it corrects, contradicts, and offers
alternative explanations for many of the marks, dates, and information set forth in Toulouse (see
above). For example, where Toulouse offered only two possible companies for the use of the M.
G. Co. mark (neither of which fit the date range for the bottle style and manufacturing
techniques), Ayres and associates listed four additional possibilities and discussed their
likelihood. Of great importance, the authors included specific citations for their sources. This is
most helpful in any serious study of marks.

The final section consisted of unnumbered pages with drawings of bottle shapes, finishes,
and manufacturer’s marks. These are detailed and include heel marks along with numbers and
letters accompanying the marks, themselves. This section is helpful but is not referenced to the
second section. I am certain the researchers intended to connect the two parts, but the report is
incomplete in this respect. A final problem is that the references for the bottle section are not
listed separately from those for the rest of the Tucson report.

Overall, this is a very important study, one that is almost essential for any subsequent
research on beer bottles or any comprehensive study of bottle marks.

Giarde, Jeffery L.

1980 *Glass Milk Bottles: Their Makers and Marks*. Time Travelers Press, Bryn Mawr,
California.

Giarde specialized in milk bottles and addressed 201 marks used on them. He followed
the style used by Toulouse, cataloging the marks alphabetically. Along with dates and historical
information, he also discussed specific points about milk bottle manufacture that was not
pertinent to other containers produced by the same company. He frequently listed marks not
found in Toulouse along with the presence/absence of date codes and other marks specific to
each company. He provided an especially comprehensive look at milk bottles produced by the
Owens-Illinois Glass Co.
In a second section, Giarde addressed other marks (e.g. REGISTERED SEALED 1-11-14) and how to interpret them, pyroglazing (the applied color labeling used after 1933), war slogans, patent numbers, other dating elements, and color. Giarde’s dates are frequently obtained empirically and are generally accurate, although he occasionally included marks and/or dates taken directly from Toulouse or Peterson. This is an excellent reference for anyone seeking information on milk bottles and their marks.

Wilson, Rex  

Wilson’s section on manufacturer’s marks was restricted to Appendix A, pages 113-130, although he included brief references to the marks, identification, and date ranges throughout the text. Except for a very short discussion on marks found on ceramic bottles, the section only discussed marks on bases of beer bottles found at Fort Union. Wilson explained, “The marks are depicted here because the bottles can be dated safely between 1863 and 1891 [the dates Fort Union was open]” (Wilson 1981:113). Wilson included no dates for each mark but attributed them to factories in most cases. He illustrated each mark found on the site along with accompanying letters, numbers, and symbols. Wilson provided an excellent study of mark variation.

Roller, Dick  

Although not a book about manufacturer’s marks, Roller’s fruit jar identification manual deserves a place in the listing. The main section of the work used drawings, photos, and descriptions to identify different types of fruit jars and, where possible, to name the manufacturer and set the approximate date range. The section was in alphabetical order by mark, maker, or name embossed on the fruit jar (e.g. STANDARD). In some cases, he included background information, although he did not cite his sources. Roller appended his book with sections of patents relating to fruit jars, relevant trademarks, biographical sketches of some “fruit jar pioneers,” and company histories of the Keystone Glass Works, Sheet Metal Screw Co., Mason Manufacturing Co., Consolidated Fruit Jar Co., Hero Glass Works, Ball Bros., Hazel Glass Co., and Kerr Glass Mfg. Co. Unfortunately, he did not include an index. Although currently out of print and difficult to find, the book contains useful supplemental information.
Bethman, David


Although Bethman’s book is a study of Washington State drug store bottles, he included a seven-page section on manufacturer’s marks found on drug store bottles. Bethman addressed 26 marks specific to drug store bottles, many of which are absent from Toulouse. Others, like the six marks used by Whitall Tatum & Co. are expansions on the Toulouse information. Although the book is difficult to find, the information is well worth the effort, if you are involved in the study of drug store bottles.

Richardson, Lillian C. and Charles G. Richardson


The Richardsons only included a single page (page 162) that is pertinent to this bibliography. Their approach was to research dates for marks that identified pharmaceutical companies. They identified and dated 23 marks by such companies as well as whether the marks were placed on bases, shoulders, or (in one case) sides of the bottles. Although only useful for pharmaceutical bottles, the list provides another level of identification available to researchers.

Creswick, Alice


Although this book is very specialized (fruit jars, as the title stated), it is a great identification guide – an attempt to catalog every fruit jar made during the 1820-1920 period. This book could have been devised with archaeologists in mind (it was not) because of the way it is formatted. Almost every jar is illustrated, including the lids, bases, and reverse sides where embossing is present. This is ideal for anyone dealing with fragmentary glass – as well as complete jars. Not only does Creswick include major variations, she showed even minor discrepancies. For example, she showed illustrations of 21 variations in basal markings on one variety of Mason jar. In addition, she provided descriptions that included the identification of the manufacturer (when known) and the date range of production. She often identified manufacturers and date ranges not found in other sources.
She began her book with a brief history of canning and followed the identification section (the main body of the book) with an extensive appendix on patents and copyrights. A second appendix (although she did not use the term) was a 12-page list of fruit jar manufacturers that included many entries not found in any other sources I have reviewed. She finished with a brief history of jar makers from Allegheny County, Pennsylvania, in 1876 and historical sketches of several jar makers. My only complaint about the work is that it is out of print and quite expensive. The two-volume set is generally priced from ca. $275. I have been unable to obtain a review copy of Volume II (fruit jars after 1920), but I suspect it contains the same high-quality information.

Porter, Bill

Porter operated in another specialty area – this time “hobble-skirt” Coca-Cola bottles. On pages 3 to 6, he enumerated all manufacturer’s marks known to be found on Coke bottles along with specific information about marks that are only found on such bottles. Coca-Cola demanded that each manufacturer follow the Coke scheme for marking, so marks were sometimes different from those otherwise used by the same companies (e.g. CHATT for Chattanooga Glass Co. instead of the usual Circle C mark) and were placed in different locations on the Coke bottles. He continued (pages 6-8) to give other useful information specific to Coke bottles including a discussion of date codes and locations for all marks. Although a specialty area, Porter’s work is accurate and useful.

Whitten, David
2004 “Glass Factory Marks on Bottles.”

This is one of the most useful and well-maintained websites for researchers of manufacturer’s marks. Whitten (a member of the research group to which this author belongs) has compiled an accurate list alphabetically ordered by marks. Generally, the site contains minimal factory information, although Whitten occasionally includes longer discussions and provides links to other pages for additional information on selected companies. These pages are updated on a regular basis and tap into the latest information available from our group research as well as Whitten’s own individual work. Unlike the other sources listed in this bibliography, this site is immediately accessible to almost anyone (requires a computer and internet access). For a fast and accurate identification of manufacturer’s marks, this is an excellent resource.
In 2003, a small research group gradually formed for the study of manufacturer’s marks, other marks on glass containers, and bottles in general. The group has a mixed membership, composed of both archaeologists and bottle collectors, working together for a common goal. Currently the group consists of Bill Lockhart, Bill Lindsey, Carol Serr, and David Whitten, with occasional input from Mike Miller.

The goals of the group are to correct many of the errors in Toulouse and other works and to locate information on marks that have not yet been identified. Within this process, we are also learning more about bottle making, what other marks on bottles can tell us, and innovative forms of research. The primary reporting mechanism for the group is a column written by this author called “The Dating Game” which appears in each issue of Bottles and Extras, the quarterly journal of the Federation of Historic Bottle Collectors. Occasional articles will also appear in the Newsletter for the Society for Historical Archaeologists and other publications. The eventual goal of the group is to produce a new book on marks for use by archaeologists, collectors, and other interested researchers. At the time of this publication, the group has researched more than 150 marks, frequently discovering new date ranges not comprehensively recorded by any other source. Our research sharply disagrees with many of the previously-published data. In addition, we offer an element lacking in virtually all previous studies of marks – discussions on how we reached our conclusions. This allows the reader to decide whether to accept or reject our dates and identification.