THE BOTTLES OF OLD SACRAMENTO:
A Study of Nineteenth-Century Glass and Ceramic Retail Containers
Part I

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PREFACE

This report is the first of three projected volumes on the nineteenth-century bottles recovered during archeological excavations in Old Sacramento. It has long been obvious that in the urban deposits of this period glass and ceramic bottles and their remnants are among the best preserved and most abundant of artifacts. As the work associated with these digs — especially the laboratory analyses — has progressed over the last few years, we have increasingly felt the need for historical accounts of the bottles which would provide a chronological and functional context for their use.

A great deal of information of this kind is already available, especially among the literature produced by and for bottle collectors. We have found this material to be of tremendous help, but at the same time, highly frustrating. With very few exceptions most writers of this genre provide little or no documentation for their historical accounts, and we are frequently left with no way of separating well-established facts from informed estimates or even pure speculation.

As a case in point, the three volumes published by Bill and Betty Wilson are undoubtedly the best general accounts available of large numbers of nineteenth-century patent medicine, liquor, and bitters bottles. The brief histories of scores of firms summarized in these reports, though they sometimes go astray, are usually quite accurate. Many bottle varieties, however, are assigned dates of production which are much more restricted than the life-spans of the firms that produced them, and we have in the published volume no means of determining whether these chronological assessments are based on archival sources, labeled specimens, or just guesses.

In addition, the collector's literature is highly selective. Some categories of bottles (liquors, patent medicines, and soda water containers, for example) have been studied in detail, while others (wine, perfume, and food and condiment bottles) are virtually ignored.

In this series we have attempted to describe and provide an historical context for all the labeled nineteenth-century bottles from Old Sacramento, and we have included a few from the beginning of the twentieth century as well. The report deals with both glass and ceramic containers and their closures, our criterion for inclusion being their use as containers of retail products. Consequently, while most of our interest is in glass containers (and we have included information on the development of glass technology), glass jars made for home canning -- a miniscule portion of the assemblage, in any case -- are ignored, while a variety of ceramic jugs and patch boxes which are usually omitted from bottle reports are included. Since the collections contain unnumbered thousands of bottles and bottle fragments, we here pay only the most cursory attention to containers lacking some form of embossed, impressed, transfer-printed, or preserved paper label.

In regard to the historical research, we have attempted, whenever possible, to consult primary sources. For the most part this translates as a systematic use of city directories, though in addition we have spent considerable time on newspaper and magazine advertising, as well as on a wide variety of other kinds of data, and we have attempted to contact for information all of those firms which are still in business. Frequently, of course, we have had to fall back on secondary reports.

The resulting reports, as the careful reader will discover, often have shortcomings. At the same time, this study is unique in attempting to provide detailed background for a large collection from a single urban area during a single half-century span. These volumes should thus be of tremendous help to those working with late nineteenth-century American sites, and hopefully will be of use to nonarcheologists interested in this historical facet of American material culture.

Acknowledgments

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THE AMERICAN GLASS BOTTLE INDUSTRY -- A BRIEF HISTORY

Glassmaking in North America began in 1609 in a wooded area one mile from Jamestown. The production of glass in America was inspired by the abundance of fuel, the great cost of importing bottles, in addition to the breakage that occurred in transport, and the desirability of glass beads for the Indian trade. The first factory was apparently well planned, and was staffed by trained German and Polish glassmakers, but it was no more successful than the rest of the initial settlement, and it had ceased operation within a year. A second attempt, in 1621, this time using Italian workers, lasted for several years but was plagued by natural disasters, inferior raw materials, and labor-management difficulties. It was consequently short-lived. Some window and bottle glass was blown, but there is no evidence that bead manufacture, which was a primary incentive for both of these early factories, was ever initiated.[1]

After the Jamestown attempts, the next documented glass factory was established in 1639 at Salem, Massachusetts. This enterprise was brief and unsuccessful and was followed by similarly-fated ventures in New Amsterdam and Pennsylvania.[2] Although window glass and other articles may have been made in some of these seventeenth-century factories, the major item of production in all of them undoubtedly was glass bottles.

The history of glassmaking during the colonial period was one of continual failure, even though there was an abundance of raw materials. Skilled workers were in short supply; English craftsmen had little incentive to move to America because conditions at home at that time were to their advantage. There was also little or no financial assistance for the early American industry, and the few skilled immigrants who arrived often found more lucrative prospects in agriculture or commerce.

By the middle of the eighteenth century, the increasing population of the English colonies had created an improved market, and difficult economic conditions in Europe made skilled workers more interested in emigrating to the New World. Two of the best known glass manufacturers of this period were Caspar Wistar and Henry William Stiegel. In 1739 Wistar built the first glassworks in Salem County, New Jersey, where he began making window glass and bottles. Wistar's enterprise failed about 1774, but one of his workmen, Joseph Stanger, established a new factory in Glassboro, New Jersey. The plant later became the Whitney Glass Works and operated as such until 1918 when it was purchased by the Owens Bottle Company.[3]

Henry William Stiegel was a German immigrant to Lancaster County, Pennsylvania, in 1750. After successful efforts in real estate speculation and in the operation of an iron foundry, he returned to Europe to study glassmaking. He brought several German and Bohemian workers back to Pennsylvania, began making glass in 1763, and soon had retail shops in several colonies. Prerevolutionary economic disturbances, however, proved disastrous, and the business ended in bankruptcy in 1774.[4]

During and after the revolution there were glass factories in Philadelphia, New Hampshire, and Massachusetts, in addition to the Stanger plant at Glassboro. At the beginning of the nineteenth century there were probably less than a dozen such factories in North America.[5] The War of 1812 cut the supply of glass from England, and the American industry expanded as a result; however, the following peace brought another flood of English imports. Yet by 1820, the industry was once more expanding. The demand for bottles increased greatly in the nineteenth century, and with this demand came changes in glass bottle technology.

The techniques in use at the beginning of the century were basically those which had been employed since the inception of glassmaking on the continent, and, indeed, long before in Europe. Glass for bottles was made from silica (usually local river sand), soda, and lime, together with various minerals for coloring. This material was heated in large pots in a huge brick or stone furnace to form the molten glass or metal. The blowpipe, which was invented sometime during the three centuries immediately preceding the Christian era, was still the indispensable tool for all glass manufacturers, and remained so until nearly the end of the century. The flared end of this tool was inserted into the pot through a window in the furnace by a worker and withdrawn with an attached gob or gather of molten glass. The worker then rolled the glass into shape on a marver, and blew the first small pocket of air into it. The glass was then shifted to the very end of the pipe and transformed into a pear-shaped form, the parison, by alternately blowing, rotating, and swinging the pipe. Next, with the aid of a mold and hand tools, the body of the bottle was blown into its final shape. A rod -- either another blowpipe or a solid rod, called a punty or pontil -- with a small gob of glass on its end was then pressed into the center of the base to form a new bond. The worker snapped off the blowpipe, and, using the pontil to hold the bottle, reheated the neck and applied a final bit of glass at the mouth to form a usable finish. Finally, the complete vessel was taken to an annealing oven, or lehr, the pontil was snapped off, and the bottle was left to cool gradually.

During the nineteenth century several modifications of this process were introduced, all directed toward greater efficiency. The first general improvement consisted of the proliferation of varieties of molds. Single-piece or dip molds for glassware had been in use in western Europe at least since the sixteenth century.[6] They were little used on bottles, however, until late in the eighteenth century, because they were not needed for the efficient production of the squat, bulbous vessels then in vogue. As taller and narrower bottles became popular, however, mold blowing became universal. Single-piece molds soon coexisted with two-, three-, and even four-piece modifications, and portable molds opened and closed by an assistant were in use at the same time as stationary models operated by the blower himself using foot pressure.[7] The primary purposes of mold blowing were to increase the speed of bottle production and to standardize vessel size. Manufacturers quickly learned, however, that molds could be used to produce embossed labels, and by midcentury bottles were well on their way to being a major means of advertising.[8]

Another improvement, along with molds, consisted of the lipping tool, a hand implement with a central guidepost and two specially shaped arms. After the body of the bottle was completed and detached from the blowpipe, an additional band of new glass was laid on around the opening. The post of the tool was then inserted in the mouth and rotated, the arms thus forming the new glass into a symmetrical finish of predetermined shape and size. This device was reportedly introduced about 1850,[9] and this seems to be a good enough date for its initial use on most categories of bottles. If we may judge from the Old Sacramento collections, however (and they are both large and representative), the lipping tool must have been in general use on French champagne bottles by the beginning of the California gold rush, since all of the early champagne bottles from Sacramento have a tipping-tool finish.[10] Bottles for still wines from Bordeaux, on the other hand, continued to be made with crude laid-on-ring finishes not only through the 1850s, but almost until the end of the century and perhaps beyond it.

A further technological development was the introduction of the snap case. This device consisted of a rod, on the end of which were four curved, padded arms that could be clamped around the bottle. This tool gradually replaced the pontil for holding the bottle while the finish was applied. Use of the snap case did not result in the unsightly and potentially dangerous scars of glass previously left on the bottom of the bottle when the pontil was broken away during manufacture. It also, incidentally, produced yet another smooth surface where glassworks could emboss their names or initials, or those of their clients. The real advantages of the snap case, however, were probably economic. First, it saved the time formerly required to carry the pontil to the pot and obtain the small gather of glass necessary to bond it to the bottle. Secondly, the snap case eliminated losses resulting from bottle breakage when the pontil bond proved insufficient, or when the bottom came out of the bottle along with the pontil. It also seems likely that the snap case could be used by workers with less training.

A date of about 1857 is often given for the advent of the snap case, although we have seen no evidence cited to support this date.[11] Similar devices such as the post or sabot, which like the snap case left no identifying marks on the bottles they held, were being employed decades earlier in Europe. Indeed, a tool clearly identical to the sabot is depicted in a seventeenth-century Dutch treatise on glassmaking.[12] That this tool was not in common use for making bottles until the early nineteenth century can only be ascribed to the fact that efficient use requires a very close fit between bottle and sabot -- something that was not possible until straight-sided vessels became common, and, indeed, until mold-blown bottles dominated the market place. Until then, the more versatile pontil was decidedly more efficient.

Both the snap case and the finishing tool illustrate a caveat often ignored by students of glass history: innovations were not introduced simultaneously in different countries, nor even in different regions. Along with local products, the American market received bottles made in factories all over western Europe. For most of the nineteenth century, for example, the great majority of wine bottles used here were made in France, while a large portion of the black glass liquor bottles in use were imported from England. Indeed, until the beginning of World War I, the United States imported far more glass than it exported (Fig. 1). Consequently, even when the introduction of new techniques by American glasshouses can be closely dated, the information will not necessarily provide an accurate date on bottles excavated here.

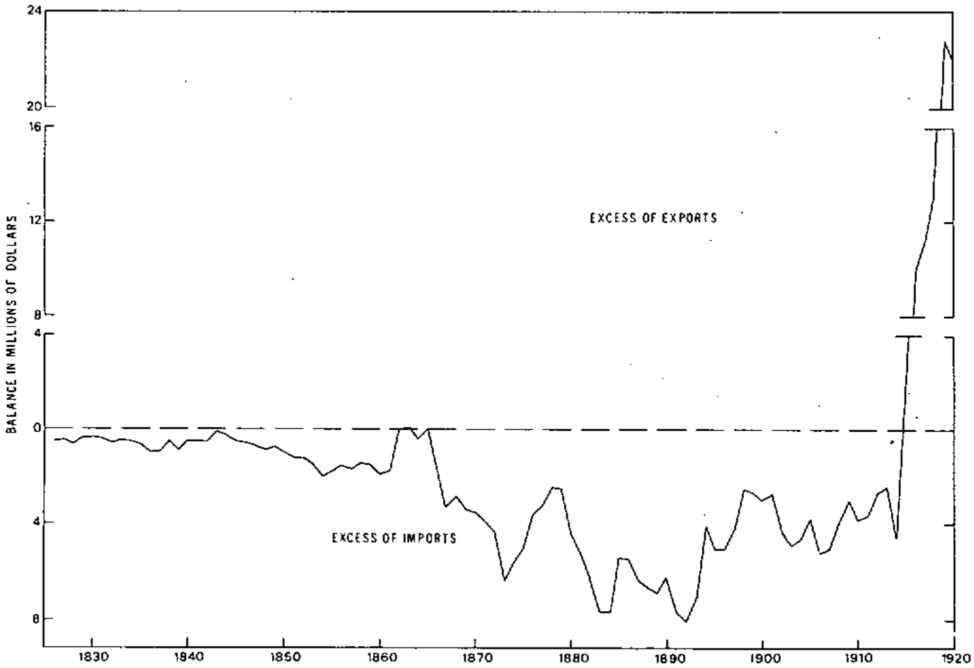
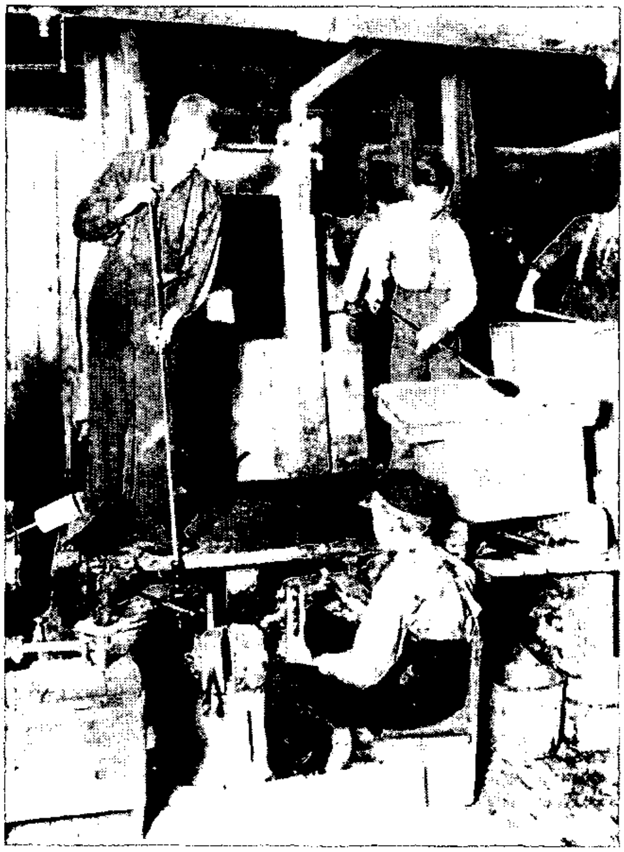


Figure 1. America's balance of trade in glass, 1826-1920 (after Scoville 1948). In 1873-1880 an average of 4,552,500 lbs of bottles filled with liquids and other products were imported annually, but these are not incorporated in the chart.

Other innovations involved the design of furnaces, replacement of pots with large tanks, and substitution of natural gas as a fuel source for the dirtier and more expensive coal.

One improvement involved not tools or equipment, but the organization of workers. This was the "shop system," a subdivision of labor supposedly introduced by the workers themselves after 1870.[13] Under this system each worker, instead of carrying out the whole process of bottle blowing, performed a specific task: the first (the gatherer) drew and marvered the gather; the second (the servitor) formed the parison; and the third (the gaffer) completed the blowing and formed the finish. In some factories even these last stages -- mold-blowing and finishing -- seem to have been handled by different workers. These men were all skilled glassblowers or apprentices. They were assisted by from three to five boys: a take-out, or molder, boy, who opened and closed the mold, applied the snap case and sheared or cracked the vessel away from the blowpipe; a cracker-off boy, who cleaned the residual glass from the pipes after each use; a snapper-up boy, who carried the incomplete vessel from the mold to the furnace to reheat the neck; and finally one or more carry-in boys, who took the reheated vessel from the furnace back to have the finish applied and then carried the finished bottle to the annealing oven. This team of adult and juvenile workers comprised a "shop" (Fig. 2); a factory had a shop for each pot in the furnace and for each ten-hour shift in operation.[14]

a



b

Figure 2. Glass shops at work: a) The worker partially obscured on the far right is gathering glass from the furnace; the apprentice standing in the center is rolling a gather on the marver, while blower on the left has just withdrawn a bottle from the mold. The can-shaped object projecting from the far left is a padded snap case. A molder-boy sits at the blower's feet, ready to shear the bottle off the blowpipe once it is placed in the snap case (from Stewart 1904). b) Carry-in boys placing finished bottles in the annealing oven (from Spargo 1909).

This system of organization was highly efficient: a single shop could be expected to produce 15 to 20 gross of pint bottles daily.[15] It was also highly rewarding for the glassblowers. The great stamina and high proficiency required for the job placed these skilled workers in a formidable position, and their average wages late in the last century were twelve times those of common laborers.[16] Glass blowers after the 1870s also had unusually strong unions.

Unfortunately, the position of the boys who worked in the factories was far less enviable. Their work was in some ways more demanding than that of the blowers:

> The earnings of the glass bottle blowers depends somewhat upon the speed of the boys who fetch and carry for them. These lads are, therefore, kept trotting at the highest speed that they can maintain for several hours. In inspecting the works, the writer found it impossible to get from a boy any consecutive statement as to his name, address, age, or parentage. A boy would say, "My name is Faber;" then run to the cooling oven with his load of bottles and returning say, "I live in a boat by the river;" then run to the moulder for another set of bottles and coming back say, "I'm going to be eight next summer," and so on. Among twenty-four lads questioned during one night-inspection, not one paused long enough to put together two of the foregoing statements.[17]
>
> Into the work of the snapping-up boy there enters the hardship of looking into the bright, glaring light of the glory hole... Not only is constant walking necessary, but also constant arm movement, some bending, and, in general, an incessant activity of the whole body... In a Pennsylvania establishment, where the temperature on the outside was 88 degrees, the temperature at the point where the snap-up [cracker-off?] rubs off the excess glass was 100 degrees; in front of the glory hole it was 140 degrees... The speed rate of the snapping-up boy is fixed by the output of the shop, and in case of such small ware as one ounce and under he must work with great rapidity.
>
> The carry-in boy, loaded and anxious, has perhaps the most mulish task of all. He must carry the red-hot bottles...on his asbestos shovel, with always an added danger of the slipping ware or the spattering glass; must hurry with his unstable, tormenting load on a slow run...
>
> In one factory...the distance from bench to oven was one hundred feet, and the carry-in boys made seventy-two trips an hour. In eight hours they thus ran twenty-two miles, half the time with a dangerous load, always in a Sahara of heat, always in a withering drift of glassy dust.[18]

Yet, since the labor performed required no special skills, wages of blowers' boys were as low as those of children in any other branch of American industry at the time. It is not surprising that the glass industry was for decades a major focus of the movement against child labor.

In spite of the innovations which had accompanied the expansion of the American glass industry during the nineteenth century, until 1915 more glass was still imported than was exported each year. Thereafter, however, this trend made a complete reversal and Europeans were striving to bring their factories up to the operating-efficiency level of those in the United States. From 1897 to 1905 the number of hand bottle blowers in the United States increased from six thousand to nine thousand men — many of them highly specialized. In 1905-1906, skilled laborers blew most of the glass containers produced in the United States. Even at this late date semi-automatic machines, fed by hand, made only wide-mouthed jars, but the industry was on the verge of a technological revolution.[19]

The first patent for a bottle-making machine was issued in 1859, and several others were patented in the following two decades. None of these devices proved successful in practice. Philip Arbogast of Pittsburgh was the first to design a machine with the three essential steps for all successful bottle machines. Those steps are: formation of the top of the neck, formation of the parison, and blowing to the desired shape. In 1882, Argobast was granted a patent for his invention, but he was unable to develop a practical machine, and assigned his rights to the D. C. Ripley Company of Pittsburgh in 1885. The Ripley Company was taken over by the United States Glass Company, which then granted manufacturing licenses. By 1893, Vaseline jars were being made by the Enterprise Glass Company under license on Arbogast's press-and-blow machines.[20]

The plunger employed in the press-and-blow process, however, was too large to be used on narrow-mouthed containers. The first machine to make narrow-mouthed bottles was patented in 1886 by Josiah C. Arnall and Howard M. Ashley; this was the first blow-and-blow method. It incorporated three separate molds: one for the neck, a second for the initial form of the bottle, and a third for final shaping. Bottles were blown successfully, but the machine required a large number of workers to operate it. One skilled gatherer and six unskilled helpers could feed two of these machines and produce about one gross of soda water bottles per hour.

The Ashley blow-and-blow machine was one of the first of the "semi-automatics." This type of machine attracted considerable interest in France and Germany during the 1890s, but it was not commercially successful. In order for a machine to be fully automatic, a device had to be developed for both gathering and feeding.

There were two ways to solve this problem: suction feed, which vacuum-sucks just enough glass into a mold, and gravity feed, in which the glass flows out through a hole in the floor of a furnace extension and is sheared off when a sufficient amount to make a bottle, or the "gob," has flowed through. The latter method is that used by contemporary glass factories. Both techniques required large reservoirs of molten glass and could be developed successfully only after the regenerative tank furnace came into use. The semi-automatic machines at the end of the century were rather simplistic -- they made only one jar at a time, were frequently operated by hand, and required skilled gatherers. It was not until 1908 that the first satisfactory semi-automatic for making narrow-necked bottles was constructed. However, fully automatic machines were coming into use by this time, and the semi-automatic progressively declined in popularity, until in 1919 there were only ten such machines in use.[21]

The fully automatic bottle machine came about from work begun at the end of the nineteenth century by Michael J. Owens. In 1898 he began his experiments and within five years he had produced a commercially feasible machine. The Owens machine was a completely automatic unit -- it both gathered the glass by suction and finished the formation of the bottle mechanically. The original model was hand-held, resembling a large bicycle pump or spray gun, but this was soon mounted on a column provided with wheels. Finally, a model was devised with six arms, each bearing a gathering and a finishing mold. Operation of this machine required less labor than a single hand-blowing shop: one man and five boys (none of them skilled craftsmen) spread over two labor shifts could adequately handle the machine. And they could produce in that time 70 gross of pint bottles.[22] The prospect of a 700% increase in productivity per (cheaper) man-hour was highly encouraging, and the Owens Bottle Company was incorporated in 1903 to produce the machines and license their use by other companies.

The Owens procedure for blowing bottles as practiced between 1903 and 1905 constituted by far the most important labor-saving technique introduced in the bottle industry. It was not at first, however, widely accepted; in fact, more than twenty years elapsed before its general acceptance in the glass container industry. The slowness of its adoption was due to several factors. First, though the Owens machine was of unparalleled efficiency in the manufacture of large quantities of containers of standardized size and shape, its economic advantage over hand and semi-automatic processes in small-lot production was not especially obvious. Product manufacturers were well aware of the marketing advantages of unique, eye-catching, or familiar bottles, and a redesigning campaign to conform bottles to a standard form made little headway. Therefore, large numbers of hand factories continued to exist for these increasingly specialized small orders of unusual-size or oddly shaped containers.

In addition, the Owens machines were very expensive, and in spite of their obvious merits, producers were hesitant to make the major capital investment necessary to install them. Not surprisingly, glass workers' unions, concerned about the replacement of workers by automation, resisted the use of the machine.[23] It has been estimated that in 1917 the Owens machine accounted for only 50% of all glass containers made in the United States and that skilled blowers and semi-automatics were responsible for almost all the rest.[24] Not until a declining market during Prohibition and the depression forced many small companies out of business was the change to automation by the commercial glass industry complete.

This mechanization revolutionized not only the glass industry itself, but also the ways in which the containers were used and their functional life expectancy. During the early and mid-nineteenth century, glass containers were such valuable commodities that they were used and reused continually. Generally bottles were not thrown away unless they were broken, and people frequently purchased their own bottles for home use. Small whiskey pocket flasks, for instance, were purchased for a good price for their convenience. Indeed, around 1870, an embossed pint bottle cost the liquor wholesaler twice as much as the whiskey it contained.[25]

Nineteenth-century druggists, in particular, faced a continuing problem with supplying vials, bottles, and tins for their products. These containers were a necessary but costly part of doing business, and once empty, they had to be stored and returned to their owners.[26] At times the problem of acquiring or disposing of containers was solved by trading them for other necessary items such as drugs, or other vials and tins. Similar problems were encountered by other merchants and manufacturers who dealt heavily in glass containers.

Until the arrival in the present century of automated mass production, bottles thus constituted a commodity of individually limited but real value. It is a fairly safe estimation, therefore, that most of them enjoyed years of usage before they finally ended up as components of a future archeological deposit.

A final note may be added on terminology. Technical terms used in this report for bottle parts or manufacturing techniques are generally those in common use in the glass industry or among glass collectors. Several of these terms are illustrated in Figure 3, while others are either defined in the text or will be readily apparent from the illustrations of individual bottles described. For those who wish a more detailed explanation of bottle characteristics and their chronology, several excellent papers by Toulouse review various aspects of nineteenth-century bottle production with clarity and authority, while many good books and articles are available for wider coverage.[27]

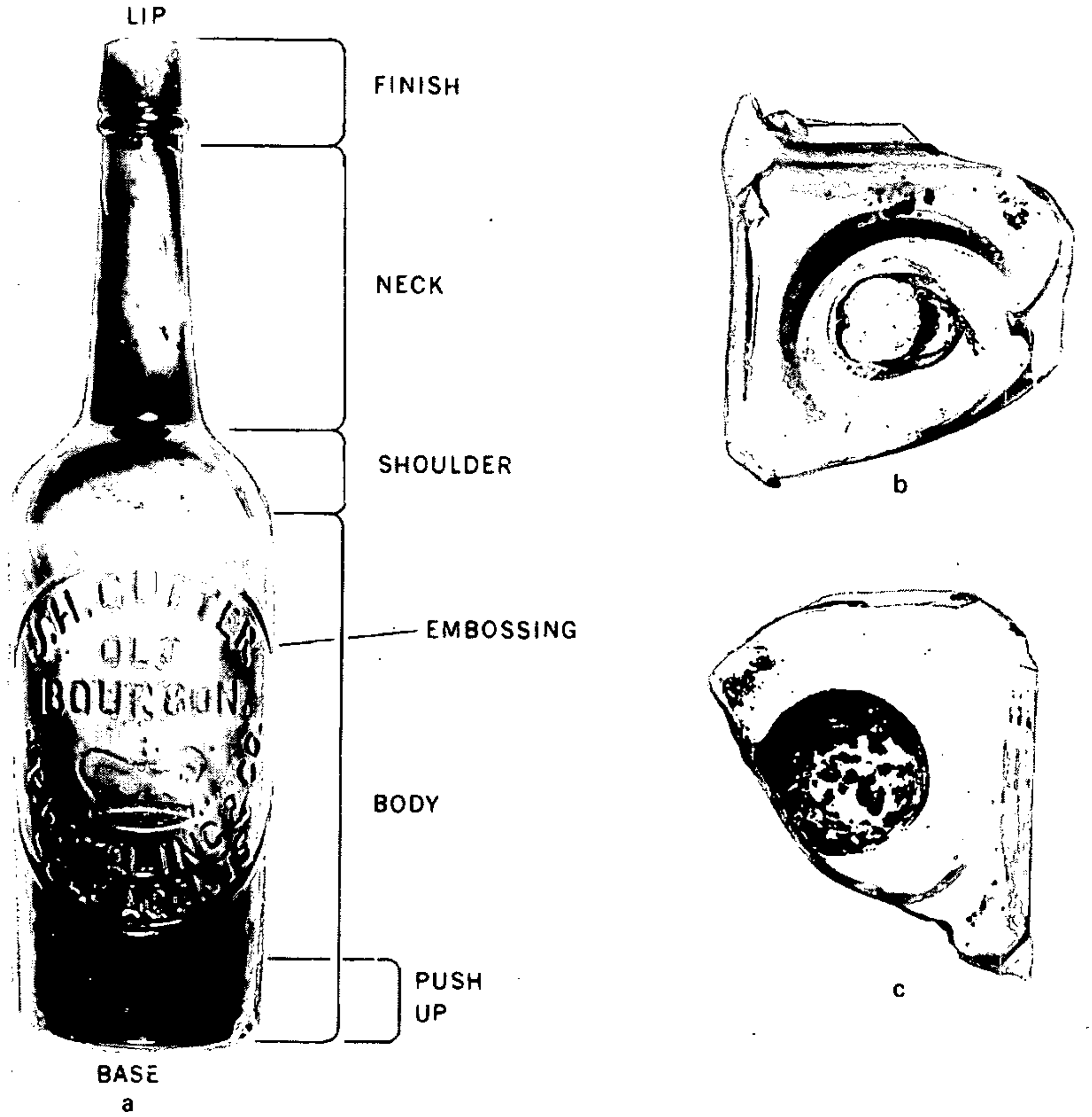


Figure 3. Bottle terminology: a) Parts of bottle; b) Bottle base showing pontil scar; c) Bottle base showing improved or bare-iron pontil scar.

Endnotes

1. Bishop 1864:232-233; Harrington 1952; Hudson 1964.

2. Bishop 1864:233; Glover and Cornell 1932:58.

3. Weeks 1883:316; Glover and Cornell 1932:580; Pepper 1971.

4. Heiges 1948.

5. Glover and Cornell 1932:580; Douglas and Frank 1972:36.

6. For a very clear description of hand blowing, see Kendrick (1968).

7. Cf. Douglas and Frank 1972:Fig. 28.

8. Readers desiring a fuller discussion of the use of molds, or wishing to use mold seams as dating tools, should see the excellent study of this topic by Toulouse (1967; 1969).

9. Lorrain 1968; Newman 1970.

10. It is noteworthy that a large collection of champagne bottles excavated from the hold of the storeship Niantic, which burned in the San Francisco fire of May, 1851, are also all made with lipping-tool finishes (Mary Hilderman-Smith, National Maritime Museum, San Francisco, personal communication).

11. Cf. Armstrong and Schulz 1980.

12. Cf. Douglas and Frank 1972:Fig. 1.

13. Keir 1928:536. Even if this date is correct for the introduction of a formally organized shop system in the United States, in principle it was hardly new. Some form of subdivision of labor appears to have been depicted by Diderot in 1772 (Diderot 1959:Plate 223) and the full shop system was in operation in England and Germany by the 1840s (Dodd 1845:92-93; Marx 1906:381).

14. Accounts of child labor in the glass industry often incidentally include descriptions of the division of labor involved (cf. Kelley 1903, 1905; Stewart 1904; Spargo 1909:154-205; Markham, Lindsey and Creel 1914:58-76). The working shift in American glass factories at the end of the century was ten hours long; this included, however, an hour off for lunch and two 15-minute rest periods (Barnett 1926:95).

15. Scoville 1948:159.

16. Keir 1928:535.

17. Kelley 1903:17.

18. Markham, Lindsey and Creel 1914:63-65.

19. Scoville 1948.

20. Douglas and Frank 1972:174.

21. Scoville 1948; Douglas and Frank 1972.

22. Scoville 1948:159.

23. Scoville 1948:105.

24. Lorrain 1968:43.

25. Wilson and Wilson 1968:21.

26. Porter and Livesay 1970:350.

27. Toulouse 1967, 1968, 1969, 1971; cf. Lief 1965; Ferraro and Ferraro 1966; Munsey 1970; Klamkin 1971; Stewart and Cosentino 1976.

LIQUOR BOTTLES

The nineteenth century was the era nonpareil of liquor consumption in America. The limited statistical information available suggests that annual per capita consumption of distilled spirits in 1790 was about 2.7 gal. This rose rapidly, in an era of abundant cheap corn and poor transportation, to an all-time high of 5.2 gal in 1830. Thereafter, with expanding urban markets for grain and increasingly efficient methods of shipping it, as well as a rising temperance movement, annual per capita spirits consumption dropped to about 3.1 gal in 1840 and 2.3 gal in 1860, and by 1880 had declined to modern levels of between 1.0 and 1.5 gal.[1]

These figures, of course, must be viewed with caution. They are based largely on liquor industry surveys and sales of taxed beverages, and hence include neither home brew nor liquor disguised as medicine. Nor do they include wine, which was locally important -- especially in California -- or beer, which became increasingly popular after the 1840s. Nevertheless, abundant indirect evidence is available to support the trend indicated by the figures.

A.M. Winkler proposes that liquor consumption be viewed as a tension-relieving device, and its nineteenth-century florescence as an adaptation to the dangers and deprivations -- and the looser social constraints -- of the western frontier.[2] The greatest shortcoming of this hypothesis is undoubtedly that it does not consider the contemporary effects of the industrial revolution in producing tension and loosening social constraints in urban communities. Aside from this caveat the frontier hypothesis seems largely plausible, and it fits well with assessments of the liquor trade in gold rush California:

> The grog-shops or tippling-houses constitute the last but not least prominent feature of Montgomery street that we will notice at the present time. The devil has certainly met with more than usual success in establishing so many of these, his recruiting officers, in this region; for we cannot visit any part of the state or city without finding them always at our elbow. San Francisco might allot one to every street corner in the city, or in other words, four to every intersection of the streets, and still her number would not be exhausted. It is astonishing what an amount of time, labor and money is misspent in this nefarious traffic. Out of two hundred and fifty thousand inhabitants of California, from twelve to fifteen thousand are exclusively engaged in this diabolical, but lucrative business.[3]

Other accounts convey the same picture:

> Drinking was the great consolation for those who had not moral strength to bear up under their disappointments. Some men gradually obscured their intellects by increased habits of drinking, and, equally gradually, reached the lowest stage of misery and want; while others went at it with more force, and drank themselves into delirium tremens before they knew where they were. This is a very common disease in California...

> So it is that a style of drinking, which would ruin a man's character in [England] or any other country where eating and drinking go together, is in the States carried on publicly and openly. The bars are the most favourite resort, being situated in the most frequented and conspicuous places; and here, at all hours of the day, men are gulping down fiery mouthfuls of brandy or gin, rendered still more pungent by the addition of other ingredients, and softened down with a little sugar and water...
>
> In San Francisco, where the ordinary rate of existence was even faster than in the Atlantic States, men required an extra amount of stimulant to keep it up, and this fashion of drinking was carried to excess. The saloons were crowded from early morning till late at night; and in each, two or three bar-keepers were kept unceasingly at work, mixing drinks for expectant groups of customers.[4]

Such records were common in the early days of the gold rush; but as the populous areas of California began to emulate the more staid life in the eastern states, the saloon seems to have lost some of its rougher edges.[5] However, in more remote areas which retained their status as mining, lumbering, or ranching frontiers, day-long drinking continued.

> The bar-rooms of Covelo sell more strong drink in a day than any I have ever seen elsewhere; and the sheep-herder, the vaquero, the hunter, and the wandering rough, descending from their lonely mountain camps, make up as rude a crowd as one could find even in Nevada. Being almost without exception Americans, they are not quarrelsome in their cups. I was told, indeed, by an old resident that shooting was formerly common, but it has gone out of fashion, mainly, perhaps, because most of the men are excellent shots, and the amusement was dangerous. At any rate, I saw not a single fight or disturbance, though I spent the Fourth of July at Covelo; and it was, on the whole, a surprisingly well-conducted crowd, in spite of a document which was given me there, and whose directions were but too faithfully observed by a large majority of the transient population. This was called a "toddy time-table," and I transcribe it here, for the warning and instruction of Eastern topers, from a neat giltedged card:

TODDY TIME-TABLE.

6 A.M.	Eye-Opener.	3 P.M.	Cobbler.
7 "	Appetizer.	4 "	Social Drink.
8 "	Digester.	5 "	Invigorator.
9 "	Big Reposer.	6 "	Solid Straight.
10 "	Refresher.	7 "	Chit-Chat.
11 "	Stimulant.	8 "	Fancy Smile.
12 M	Ante-Lunch.	9 "	Entire Acte (sic).
1 P.M.	Settler.	10 "	Sparkler.
2 "	A la Smythe.	11 "	Rouser.

12 P.M. Night-Cap.

GOOD - NIGHT

> My impression is that this time-table was not made for the latitude of Covelo, for they began to drink much earlier than 6 A.M. at the bar near which I slept, and they left off later than midnight.[6]

Western folklore, of course, has enshrined whiskey as the drink of the American frontier, but we should take this notion with a grain of salt. The embossed bottles from Old Sacramento, for example, include more gin or schnapps containers than whiskey bottles. Although there is a bias here (gin was usually imported, or pretended to be, and so may have come in fancier containers than whiskey), still the early topers of the Golden West had a wide choice. This is amply illustrated by the liquid wares of one of San Francisco's "large and fashionable" establishments, as recorded by an early argonaut:

> ...On the shelves and counters are dozens of labeled decanters and bottles, filled with the choicest liquors and artificial beverages that the world produces; other articles of similar use and value are also kept for sale, and stored away in their appropriate places. As a minute survey of the bill of fare may not be uninteresting, I herewith present it: --

BILL OF FARE OF A CALIFORNIA GROGGERY.

Bowie Knives and Pistols.

Scotch Ale,	Burgundy,
English Porter,	Haut Bersae,
American Brandy,	Champagne,
Irish Whiskey,	Maraschino,
Holland Gin,	Tafia,
Jamaica Rum,	Negus,
French Claret,	Tog,
Spanish Sack,	Shambro,
German Hockamore,	Fisca,
Persian Sherbet,	Virginia,
Portuguese Port,	Knickerbocker,
Brazilian Arrack,	Snifter,
Swiss Absynthe,	Exchange,
East India Acids,	Poker,
Spirits Stews and Toddies,	Agent,
Lager Beer,	Floater,
New Cider,	IOU,
Soda Waters,	Smasher,
Mineral Drinks,	Curacoa,
Ginger Pop,	Ratafia,
Usquebaugh,	Tokay,
Sangaree,	Calcavalla,
Perkin,	Alcohol,
Mead,	Cordials,
Metheglin,	Syrups,
Eggnog,	Stingo,

Capilliare,
Kirschwassen,
Cognac,
Rhenish Wine,
Sauterne,
Malaga,
Muscatel,
Brandy Smashes,
Whiskey Punch,
Cherry Bounce,
Shamperone,
Drizzles,
Our Own,
Red Light,
Hairs,
Horns,
Whistler,
White Lion,
Settler,
Peach and Honey,
Whiskey Skin,
Old Sea Dog,
Peg and Whistle,
Eye Opener,
Apple Dam,
Hot Grog,
Mint Juleps,
Gin Sling,
Brick Tops,
Sherry Cobblers,
Queen Charlottes,
Mountaineers,
Flip Flap,
One-eyed Joe,
Cooler,
Cocktails,
Tom and Jerry,
Moral Suasion,
Jewett's Fancy,
New Plus Ultra,
Citronella Jam,
Silver Spout,
Veto,
Deacon,
Ching Ching,
Sergeant,
Stone Wall,
Rooster Tail,
Vox Populi,
Tug and Try,

Segars and Tobacco.

The annual consumption of beer, wines and liquors in this State exceeds five millions of gallons, a vast deal of which is retailed at extraordinarily [renumerative] rates. All of the first class establishments, I mean those that deal in good qualities, charge twenty five cents for every drink or dram they sell; but an adulterated article, of which there is always an abundant supply in market, can be procured at about one half that price. In some of the most popular and respectable saloons, genuine articles are always kept on hand for the benefit and accommodation of those who are willing to pay for a delicious (?) draught. I may not be a competent judge, but this much I will say, that I have seen purer liquors, better segars, finer tobacco, truer guns and pistols, larger dirks and bowie knives, and prettier courtezans here, than in any other place I have ever visited; and it is my unbiased opinion that California can and does furnish the best bad things that are obtainable in America.[7]

The liquid portion of these "best bad things" came in a variety of containers. The bulk of the alcohol reached the vendor in barrels or kegs and was served directly into glasses. Some, however, was shipped in bottles, or was bottled after reaching California. The bottles found in Old Sacramento which held liquor are discussed below; they are divided for convenience into stoneware and glass containers.

Stoneware Jugs

Undoubtedly the most distinctive of the liquor containers in the present collection are the large ceramic jugs. These stoneware vessels stand about eleven and one-half in high and held about a liter of liquid. All have a small handle at the base of the neck; they were closed with corks covered by foil caps. If the Old Sacramento collection is any indication, most of the jugs imported to the United States held German mineral water (the manufacture and distribution of these containers are discussed more fully in the mineral waters section), but at least two brands of Holland gin (schnapps) are also represented. The kornschnapps jug described with them is unique in the present collection.

Figure 4. Ceramic liquor containers: a) Houtman gin jug; b) detail of Houtman impressed label; c) Wynand Fockink impressed seal; d) Nordhausen Kornschnapps jug.

A. Houtman & Co.

The jug stamped with this name (Fig. 4a-4b) is unusual among the labeled specimens of this type in having no circular company logo, no designation of the locality of origin, nor any pottery lot number. The base of the vessel is wire-marked like most of the mineral water jugs.

We have no information on the early history of this firm, but A. Houtman & Co. of Schiedam in the Netherlands exhibited gin "of a very good aroma, and in general of good quality" at the Centennial Exhibition in Philadelphia in 1876. Seven years later, Houtman gin was being advertised locally by Richardson and Harrison, a San Francisco liquor import firm.[8] During the 1890s, Sherwood and Sherwood of San Francisco were acting as agents for Houtman's Holland Gin, and it was on the local market at least as late as 1901.[9] The modern firm, after a series of mergers beginning in the 1950s, has been incorporated into Distilleerderij M. Dirkzwager B.V., in Schiedam.[10]

Wynand Fockink

This company is represented in the Old Sacramento collection by two broken vessels; each bears the impression of a circular seal showing a rampant lion surrounded by the word "AMSTERDAMSCHE" (Fig. 4c). Fortunately, 12 of these bottles, still bearing foil caps embossed "WYNAND FOCKINK," were excavated from the hold of the steamship Bertrand, which sank in 1865. Not so fortunately, the Bertrand report describes the contents of the bottles as "Amsterdam ale."[11] Actually the bottles were for gin or one of the several liqueurs made by this company.

Wynand Fockink was certainly one of the most durable firms represented in Old Sacramento: it was founded in 1679. When the company began exporting liquor to America we are unsure, but clearly the trade was well under way by the end of the Civil War. They were still shipping gin to the United States in stoneware jugs (as well as in case bottles) at least as late as the beginning of the present century. The firm merged with Bols Nederland B.V. about 1960.[12]

Nordhausen Kornschnapps

A broken earthenware jug is unique among the liquor containers recovered from Old Sacramento. Its shape, color and glazing all differ markedly from those of the tall stoneware gin and mineral water containers just described. This squat vessel held about 30 oz, and was made of cream-colored earthenware with a brown neck and dark blue label. Though a handle placed near the lip and the lip itself have been lost, most of the body is present and the label "BEN...EBENHORST/Nordhausen/KORNSCHNAPPS" can be read (Fig. 4d). Unfortunately, the full name of the bottler cannot be reconstructed.

Nordhausen Kornschnapps in jugs ($1.50 each) were advertised in San Francisco at the turn of the century, but not by brand name. One 1906 liquor trade directory lists two brands of imported kornschnapps, both from Nordhausen, but neither coincides with the present label.[13]

Glass Bottles

The glass liquor bottles from Old Sacramento vary considerably both in size and shape. Although most of those included here are of amber glass and embossed, this reflects a bias in the last two or three decades of the last century, when both embossing and amber glass were in vogue. The vast majority of the spirit bottles in the collection are unembossed and of black glass. The vessels occur in sixths, fifths, pints, and a variety of odd sizes, and as square and circular bottles and flasks. Those embossed with brand names or liquor manufacturers' marks are detailed below.

Dr. Abernethy's Green Ginger Brandy

This product is represented by a broken, thin, amber ca. 22-oz bottle, made in a two-piece mold with horizontal embossing: "DR. ABERNETHY'S/GREEN/GINGER BRANDY/JOS. N. SOUTHER MAN'F'G. CO./SAN FRANCISCO." The finish has not been preserved.

The Dr. Abernethy in question is clearly identified in the advertising for the product:

> John Abernethy surgeon was born in London in 1765 and died in April, 1831. His parents removed to London while he was yet young and he had but a common education. He was apprenticed to Sir Charles Blick, surgeon and lecturer of St. Bartholomew's Hospital in London and within the walls of that institution he received his professional education. As a surgeon, Mr. Abernethy's skill was of the first order, and he first performed the bold operations of tying the carotid artery and the external iliac artery. The success of these great operations made his fame European. It was however, as a pathologist that Mr. Abernethy attained his chief celebrity. He was pupil of the celebrated John Hunter, one of the most philosophic intellects of modern times, and from him he imbibed that taste for physiological principles which distinguished his views of surgery. Surgery originally confined to dentistry and blood letting had risen above its lowly condition, but was still little more than manual art. But Mr. Abernethy's work entitled the "Constitutional Origin and Treatment of Local Diseases" opened the way to knowledge of truths now universally established, but which 50 years ago were perfectly novel. Abernethy ascribed local diseases to general constitutional derangement, and topical treatment which had previously been the surgeon's sheet anchor was by him reduced to a secondary rank.
>
> Henceforth it was to be an auxiliary to the more comprehensive method, which included the whole system in the scheme of its ameliorative effects. Mr. Abernethy also propounded another theory -- that constitutional derangements primarily proceed from affectations of the stomach and bowels. This idea, however lost sight of, was not so new to professional students as the other.

Nevertheless its importance cannot be overrated and the sanction of Mr. Abernethy's opinion caused increased attention to this part of the human frame as the cause of disturbance. In the latter part of his career he perhaps carried this doctrine to its extremest limit, and by presenting a point of attack for ridicule somewhat damaged the popularity of his views, although their soundness remained unimpaired. In his private practice Mr. Abernethy's eccentricities of manner have furnished copious materials for anecdote. Much, no doubt, has been laid to his charge which had no foundation except in the too fertile brain of professed humorists. Enough of truth remains, however, to affix upon him the stigma of needless and unprovoked coarseness to his patients yet the legacy he left the world in his formula for "Green Ginger Brandy" more than counter balances all his eccentricities.[14]

While this summary conveys Abernethy's eminence as a surgeon in the late eighteenth and early nineteenth centuries, his available works do not appear to contain any reference to green ginger brandy, and his espousal of it may be apocryphal.[15]

The brand was trademarked by Charles S. Ross of San Francisco in 1871. Joseph N. Souther is first linked with the product in 1872, when sole agency for it was announced by the San Francisco liquor importing and wholesaling firm of Chenery, Souther & Co. This company had begun operation on Clay Street in 1869, and had moved to California Street three years later, just prior to announcing their agency for the brandy.[16] Chenery and Souther's advertisements at this time do not disclose who was then manufacturing it (Fig. 5), but the use of Abernethy's name and reputation provided their advertisements with an anecdotal character unusual for the time:

Figure 5. Liquor advertisement: Abernethy's Green Ginger Brandy (*Pacific Wine and Spirit Review* Dec. 31, 1903).

> Dr. Abernethy..., more noted for his skill as a physician than his pity, lost a brother who left a little boy and girl behind without a home. The doctor kindly took the boy home to his good wife who found he did not say his prayers and was dreadfully afraid of the dark. He said, "When Mother was alive she used to hear my prayers, but now I have no one to hear me."
>
> She told him God would hear him pray and if he would ask Him, He would not let the dark hurt him. The boy did so and after that Mrs. A. had no more trouble, he was as brave as a lion. Soon after this he went to visit his sister adopted by an uncle, a good Presbyterian deacon, who was much pleased, on hearing him relate his experience to his sister, at such an example of faith and early piety, and questioned him in regard to it; also if his uncle the doctor prayed? He said, "Oh no, he did not need to: he had a pistol."[17]

Other advertisements came more to the point, as in the adventure of "Precocious Young Macaulay," a four-year-old sufferer:

> Having eaten too heartily of candies, fruits and nuts, the lad was taken suddenly ill with an alarming colic, so much so, his life was despaired of. The hostess was all kindness and compassion. She immediately administered to him a wine glass full of Dr. Abernethy's Green Ginger Brandy which she always kept at hand, and when after a while she asked him how he was feeling, the little fellow looked up in her face and replied: "Thank you, madam, my agony has abated."[18]

Other than this, the brandy, which was "not a patent medicine," but a special compound of cognac and essence of Jamaica ginger, was proclaimed a preventative of cholera and cholera infantum and a remedy for diarrhea.[19]

Souther and Richard Chenery continued in business as Chenery, Souther & Co. until nearly the end of the decade. During this time however, Chenery was developing other enterprises; he married a rich widow in 1873 and opened an office with an interest in mining on Pine Street in 1875. By 1879 Chenery had left his partnership with Souther. We find no reference to him in the San Francisco business directories after 1878.[20]

The partnership was replaced by the firm of Joseph N. Souther & Co. The new firm, located at 122-124 Market Street, appears in the directories in 1880, and seems to have been stable for the following decade. The company is described in identical entries during these years as "manufacturers flavoring extracts." In 1891, however, the company underwent a reorganization. The name was changed to Joseph N. Souther Manufacturing Company, and the officers were listed as Charles L. Dingley, president, and Joseph N. Souther, manager. The reorganized company, like its predecessor, is listed as "proprietors Dr. Abernethy's Green Ginger Brandy." The product is again associated with the company in 1892 in an advertisement hailing Dr. Abernethy's potion as a cure for cramps and colic.[21]

Another reorganization in 1894 seems to have eliminated Souther from active participation in the company and to have established John Mulhern as manager, a position Mulhern continued to fill in 1895. In the following year, the name of the Joseph N. Souther Manufacturing Co. disappeared from the directory, and Mulhern himself was listed as "manufacturer of flavoring extracts" at the Market Street address.[22]

For the next ten years, from 1897 until 1906, Mulhern was in business at 124 Market Street, at first continuing to make flavoring extracts. In 1899, however, he was listed as selling soda water supplies and machinery. Still, like Souther before him, he acted also as agent for Dr. Abernethy's Green Ginger Brandy. The brandy is again associated with the Mulhern firm in 1900 and 1905 directories, and advertisements for the product, though placed by Mulhern as general agent, still picture bottles with "Jos. N. Souther Man'f'g Co" labels.[23]

Mulhern continued in the soda water apparatus business, undaunted by the earthquake of 1906. It appears that he was forced, however, to vacate the premises at 124 Market Street, for we find him in business on 25th Street in 1906 and 1907 and on Second Street thereafter.[24]

Mulhern was listed as agent for Dr. Abernethy's Green Ginger Brandy in 1907 and 1908; his interests at this time again included flavoring extracts. In 1909, he was acting as agent for a mysterious product called "Electropoise." After 1910, Abernethy's elixir was no longer associated with Mulhern's firm; and by 1919, in any case, the good doctor's concoction would have fallen prey to the great prohibition.[25]

Bénédictine

This single, distinctively shaped container is a squat, steep-shouldered one-liter bottle of olive green glass. It was hand-blown in a three-piece mold. The top of the lip is beveled and the laid-on ring around it is indented on opposite sides for passage of the wire for the cork. Around the shoulders is the embossing "BÉNÉDICTINE," flanked by crosses, and, on the opposite side, an embossed horseshoe-shaped ridge meant to frame an applied wax or plastic seal (Fig. 6b).

Figure 6. Bénédictine bottles: a) Bottle in an early advertisement (*La Lune* Nov. 25, 1866); b) Turn-of-the-century bottle from Old Sacramento.

This well-known French liqueur was first compounded around 1510 by a monk, Dom Bernardo Vincelli, at the Bénédictine abbey at Fécamp in Normandy. The drink inspired considerable enthusiasm and the formula was recorded and preserved. When the abbey was destroyed and the monks driven away during the French Revolution, however, these records were lost. Several decades later Alexandre Le Grand, a Fécamp merchant, in inspecting some manuscripts which he had inherited, rediscovered the formula. After considerable experimentation, he perfected the manufacturing process and began commercial production in 1863.[26]

The liqueur is compounded in a three-year process from some twenty-seven different herbs and spices, many of the former originally collected from the sea cliffs at Fécamp. Among the ingredients are Sri Lanka tea, hyssop, juniper berries, balm (myrrh), angelica, cinnamon, cloves, nutmeg, and vanilla. The ingredients first are hand sorted into five separate preparations, and these are individually distilled or macerated in alcohol and aged in oak casks for six months. These preparations are then blended and again aged. Finally water, alcohol (if necessary), sugar syrup, honey, caramel, and saffron are mixed and the liqueur filtered and bottled.[27]

Le Grand conducted a strenuous advertising campaign, stressing, like most of his contemporaries, the health-promoting benefits of his product: Bénédictine eliminated digestive complaints, promoted pleasing plumpness in ladies, and provided a nondestructive alternative to absinthe.[28] Unlike his competitors, however, and although the modern enterprise is completely in secular hands, Le Grand and his successors consistently stressed the clerical lineage of the liqueur. Bénédictine bottle labels have always borne clear references to the religious order, and in 1876 Le Grand erected a large Renaissance-style palace to house his distillery and a museum of religious antiquities.

The firm has for a long time placed great emphasis on export markets. In 1867, after only four years of production, Le Grand began shipments to the United States;[29] today the company's products (primarily Bénédictine and B and B -- a blend of Bénédictine and brandy first produced in 1938) constitute 50% of all French liqueur exports to this country.

The Old Sacramento bottle does not represent the earliest years of production, for the first containers used were broader with rounder shoulders (Fig. 6a). Late in the last century, bottles of the Sacramento style were introduced, and these were used (though of course not on the American market from 1919 to 1932 because of Prohibition) until the end of World War II. At that time the modern machine-made and screw-capped containers were introduced.[30]

Champagne Mead

This enigmatic product was sold in containers which differ from soda water bottles of standard style only in being octagonal rather than round. The glass is pale aqua. The bottles have a blob-top finish and seem to be from a two-piece mold. The vertical embossing, on two adjacent panels, reads "CHAMPAGNE//MEAD." The collection has five specimens. Although both champagne and mead are alcoholic beverages, we are unsure whether the present product fits this category; it is considered here, however, for convenience.

"Champagne Mead" was a registered trademark in California as early as 1870. On April 4 in that year, Frank Kenyon of Kenyon, Gass, & Co. filed claim to its sole and exclusive use.[31] The fate of Kenyon is not clear, but in 1871 the firm of Gass and Company was proprietor of the Champagne Mead Works at 114 Turk Street. The company included

William C. Gass, John H. Boland, and William H. Emerson. Frank Kenyon was not associated with the enterprise and was apparently not resident in San Francisco in 1871 or thereafter.[32]

Gass and Company, like its predecessor, appears to have been in business for only a short time. The name of the firm was not included in the San Francisco business directories after 1871.[33] After the apparent closing of the business in that year, Gass' name disappeared from the record along with that of the firm bearing his name. Boland became a men's clothing salesman; William H. Emerson, or another man bearing that name, was listed as a bottler for the Bay City Soda Water Works.[34]

J.F. Cutter Extra Bourbon

An amber glass fragment embossed only "...CUTTER/...XTR..." is all that remains of this bottle, but it is clearly a bottle for J.F. Cutter Extra Bourbon.[35]

We have no information on the early career of John F. Cutter. He was, however, the son of J.H. Cutter of Kentucky bourbon fame (see J.H. Cutter Bourbon/A.P. Hotaling), and he arrived in San Francisco in late 1870 or 1871. Claiming to have inherited, on his father's death a decade previously, the rights to the J.H. Cutter trademark, he promptly went into business with E. Martin & Co., a San Francisco spirits wholesaling firm.[36]

Edward J. Martin was born in Ireland in 1819 and emigrated in the mid-1840s. After a brief stopover in New York and a two-year stay in Santiago, the beginning of the gold rush brought him to San Francisco in 1848. He worked for a while in the southern mines, became involved in real estate speculation, and finally opened his liquor distributorship about 1859. His real interests seem to have been in finance, however, and he operated a private savings bank for two years before being appointed secretary and treasurer of the Hibernia Bank in 1864. His financial connections apparently involved most of his time, and by the time Cutter arrived in San Francisco, the E. Martin & Co. liquor operation was actually being managed by D.V.B. Henarie. Martin died in 1880.[37]

J.F. Cutter's arrangement with Martin & Co. is not precisely known. He seems never to have been a partner, but merely to have sold the use of his name and the putative rights to his father's name. He may have worked for the company as an agent of some kind, since he maintained an office at the firm's 408 Front Street address. In any case, E. Martin & Co. began producing "J.H. Cutter" whiskey -- manufacturing it locally rather than importing it from Kentucky -- and even distributing it in embossed bottles.[38]

Not surprisingly, this activity brought Cutter and Henarie into conflict with the original firm in Louisville, then operated by C.P. Moorman & Co. In 1871, Cutter filed suit against Moorman and his partner M.J. Hardy (who was Cutter's brother-in-law), alleging exclusive rights to the J.H. Cutter trademark and asking for $50,000 in damages. Unfortunately, the trial demonstrated that J.F. Cutter had inherited neither the trademark nor anything else, his share of the inheritance being in the hands of trustees until he should prove competent to manage it. After two years of arguments and testimony, the court dismissed the suit.[39]

Deprived of their claim to the J.H. Cutter brand, Martin & Co. decided that one Cutter was as good as another, and in 1873, began marketing J.F. Cutter whiskey. Having sold the use of his name, J.F. Cutter had left San Francisco by 1875. Martin & Co. continued to make the whiskey, however, and Henarie operated the firm until 1900, when it incorporated. Whether he actually acquired title to the business is unclear, but his was the only name associated with the firm in the years after Martin's death.[40]

When E. Martin & Co. incorporated in 1900, it moved to a new location at 54-56 First Street. The new corporation's officers were L.D. Radgesky and Alexander G. Bell, vice-president and secretary, respectively. The lack of a listed president suggests that Henarie retained control of the firm, although, by 1905, the president of the corporation was Arthur Silverberg. J.F. Cutter Whiskey continued in the San Francisco directory until the onset of Prohibition, disappearing in 1918. E. Martin & Co. continued among the San Francisco listings until the 1920s.[41]

J.H. Cutter Bourbon/A.P. Hotaling

This product is represented by fifths of three styles, all of amber glass, made in two-piece molds, with sloping-collar finishes. The embossed legend ("J.H. CUTTER/OLD BOURBON/A.P. HOTALING & CO./SOLE AGENTS") is identical in two of the forms. In one variant (represented by three bottles), however, the legend is circled, with a central crown (Fig. 3a); in the other form there is no circle, and the crown, if any, is on the shoulder, which is missing from both of the broken specimens representing this style.

The third variant (one specimen) exhibits only the vertical embossing "J.H. CUTTER." Wilson and Wilson illustrate a bottle of this variety which still bears a paper label showing it to date from the agency of Sherwood & Sherwood.[42]

John H. Cutter began making whiskey under his own name in Louisville, Kentucky, about 1850. In 1857, he took Charles P. Moorman into partnership, and they operated as J.H. Cutter & Co. for the rest of the decade.[43] In July, 1860, five days before his death, Cutter sold out his interests to Moorman, who, with Milton J. Hardy, Cutter's son-in-law, continued to make J.H. Cutter Whiskey -- apparently operating interchangeably as J.H. Cutter & Co., C.P. Moorman & Co., and M.J. Hardy & Co. They were later joined for several years by George O. Blake. Hardy was primarily responsible for marketing the bourbon in the New York area, while Moorman ran the distillery. In 1879, Hardy sold out his interest. Moorman continued the enterprise on his own, achieving -- at least in the rose-tinted view of the spirits trade press -- a reputation for staunch advocacy of fine blending and long aging, creating bourbons which "send up a fragrance that fairly rivals the scented flowers." J.H. Cutter Whiskey was first exported to California in 1856. The J.H. Cutter Old Bourbon trademark was registered in the state in 1864, and A.P. Hotaling & Co. had become the Pacific Coast agents for the brand by 1867.[44]

Anson P. Hotaling was born in New Baltimore, New York, in 1830, and in 1852 set out to seek his fortune in the gold fields of California. A brief stint at mining apparently proved disillusioning for Hotaling, and by 1854 he was established in San Francisco as clerk and then junior partner in the liquor business of Patrick Riley at 154 Sansome Street. More successful in merchandising than in mining, Hotaling became the senior partner in the business in 1856.[45]

In 1859, John W. Griffin replaced Riley as Hotaling's partner on Sansome Street, but by 1867 Griffin had gone into business for himself. In the same year, A.P. Hotaling & Co. moved to 431 Jackson Street and the firm was listed for the first time in the San Francisco business directory as agent for J.H. Cutter Whiskey. The company continued in business at the Jackson Street address for the next twenty years, and though little change is apparent in the directories, the firm had become by 1880 the largest liquor wholesaler in San Francisco, with an annual volume of 1,500 to 2,000 barrels, and a stock inventory which seldom fell below a cash value of $500,000. A branch office in Portland was reputedly "the leading establishment" in the wholesale liquor trade in Oregon, carrying a stock valued in the mid-1870s at $60,000 to $70,000. Later, branches were opened at Seattle, Spokane, and Boise.[46]

The Jackson Street establishment was a two-story 50-by-150 ft brick structure built by Hotaling especially to house his business. The building and the operations were considered impressive enough in 1874 to elicit a lengthy and detailed description in a trade journal, including an account of the bottling operations:

> The bottling room is situated on the [second] floor. Two large tanks, each with a capacity of twenty-five hundred gallons, are kept full of whiskey, for the purpose of bottling. The liquid is drawn off by a faucet at the base, and runs into the regular "J.H. Cutter" bottles. These are then taken to the corking machines and from thence to a bench, where the well-known "J.H. Cutter" label is attached, and the bottles placed in a case, when they are ready for the market. The firm are at present putting up about one thousand cases a month of their best whiskies, and the demand is steadily increasing all the while... It is well known to the trade that the manufacturers of "J.H. Cutter" whiskey have a patent barrel... The pecularities are that it is five inches longer than the ordinary barrel used in commerce, and has sixteen wood and four iron hoops, while the staves are 1-1/4 inches thick. So many poor imitations of this standard article have been attempted, that it was deemed necessary to have a special barrel made and patented to protect their customers... Even the bottles formerly used by the agent were counterfeited, and Mr. Hotaling decided to manufacture a special bottle for this market.
>
> Formerly whiskey was put in what are called "sixths", or six bottles to the gallon. Mr. Hotaling manufactured a large bottle, of which five constitute a gallon, and had the words "J.H. Cutter" raised in Roman letters. This was immediately imitated, so anxious are the other dealers to palm off on their customers an imitation for the genuine "J.H. Cutter".[47]

A.P. Hotaling & Co. underwent a major reorganization in 1891. Hotaling, then 61 years old and thinking perhaps of his eventual retirement, incorporated his business and gave major responsibility to two of his sons in the new structure. Richard M. Hotaling became secretary, and Anson P. Hotaling Jr., treasurer. The reorganized company continued to serve as agents of J.H. Cutter.[48]

Except for the sale of the branch offices in 1895, the firm continued unchanged during the 1890s. At the end of the decade both A.P. Hotaling and A.P. Hotaling Jr. died. Richard M. Hotaling succeeded his father as president of the company. Thomas Kirkpatrick served as vice-president, C.W. Conslisk as secretary, and J.P. Christensen as business manager. In 1903 Kirkpatrick became general manager of the firm, and instituted a major reorganization. The company obtained a large heated warehouse in addition to the original plant, and since old whiskeys were in very short supply in the eastern market, began blending their own, called "Old Kirk," which they trademarked in the same year. This brand was obviously intended as a cheaper alternative to J.H. Cutter. Whether its inauguration was stimulated by changes in their relationship with the Louisville operation or by economic effects on their clientele, we are not sure, but by mid-1904 Hotaling & Co. had lost the J.H. Cutter agency and had shifted their emphasis wholly to Old Kirk.[49]

After cancelling the Hotaling contract, Moorman & Co. gave the J.H. Cutter agency to Sherwood & Sherwood, an old San Francisco spirits wholesaling firm that also handled Houtman Gin. Sherwood & Sherwood continued as the Pacific Coast wholesalers of J.H. Cutter until Prohibition.[50]

J.T. Daly Clubhouse

No complete specimens of this type of bottle (which seems to have been intended for both whiskey and gin) were found, although fragments were recovered from at least two different sites. The bottles are of olive green glass and are four-sided, resembling case bottles for Holland gin. The embossing reads only "J.T. DALY/CLUBHOUSE" (Fig. 7).

In 1855, William H. Daly first appeared in the directories of New York City, listed as a Wall Street merchant whose home was in San Francisco. Only in this initial listing was there any indication that he had ties with California, and subsequently his home was listed as Bergen Point, New Jersey. In 1857, John T. Daly joined William, and together they formed the firm of J.T. & W.H. Daly at 19 South William Street. Although listed as brokers and merchants, they were primarily wholesale liquor dealers who bottled and sold several different spirits. Among the products distributed by the Dalys were J.T. Daly Clubhouse Whiskey, Daly's London Clubhouse Gin, Wm. H. Daly's Pioneer Whiskey, Aromatic Valley Whiskey, Daly Pennsylvania Rye, and Daly's Old "Q" Brandy.[51] In 1872, Dickson, DeWolf & Co. of San Francisco advertised that J.T. & W.H. Daly had "disposed of their right and interest in their celebrated brands of fine old whiskies" to H. & H.W. Catherwood of Philadelphia, for whom Dickson and DeWolf were agents. However, the "disposed" brands listed ("AAA, Century, Eureka, Cranston, etc.") do not include Clubhouse.[52]

J.T. & W.H. Daly continued to operate until 1878, when William formed his own company, and John T. disappeared from the directories. In 1883, William was listed both as a dealer in fancy goods and as secretary. The subsequent year, William was again listed as a broker and remained so listed until 1886. If the Dalys moved back to San Francisco or any other part of California, this information was not recorded in the available West Coast directories, and after 1886 no trace of either Daly was found.[53]

William H. Daly Whiskey

Only a fragmentary bottle of dark olive green glass represents this product. The container is circular, from a two-piece mold, with a strongly projecting lip finish. It is embossed "[WM. H.] DALY//[NEW YOR]K," in front of which a long rectangular area is evident where other embossed letters ("JOHN T. &"?) have been cut out of the mold.[54]

Wilson and Wilson date bottles with this altered label to ca. 1863-1865,[55] but if the mold modification reflects J.T. Daly's departure from the firm, a date of 1878-1882 would seem more appropriate. The company history is discussed under J.T. Daly, above.

Figure 7. Liquor advertisement: Daly's Clubhouse Gin (*Mercantile Gazette & Shipping Register* June 26, 1858). California State Library.

Dan Donahoe's Mint Saloon

This clear glass 12-oz "pumpkin-seed" or picnic flask is from a two-piece mold. It has a flat base and a bead lip with a ring finish. The embossing ("DAN DONAHOE/MINT/SALOON/MARYSVILLE") is in a circle on the front of the flask (Fig. 8).

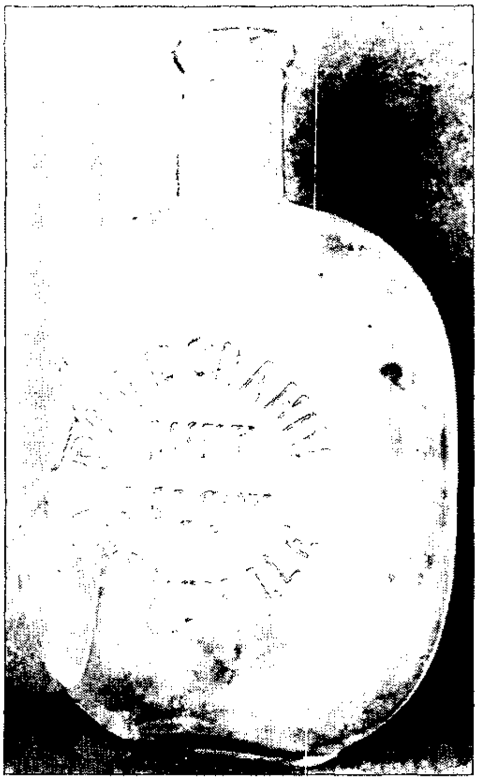


Figure 8. Liquor bottle: Dan Donahoe's Mint Saloon.

Daniel P. Donahoe was born in Montreal, Canada on June 13, 1849. His mother, Mary, was a native of Limerick, Ireland. Before the age of 18, young Daniel had received what was termed a "fairly liberal" education, and had worked in the insurance business in Montreal. In 1867, "stricken with California fever," he found his way to the booming city of Marysville.[56]

For the next 14 years, Donahoe worked as a butcher for the meat company of P.S. Slattery (later Valley Meat Company), and one wonders if in these early years California really lived up to his expectations.[57] By 1881, however, hard work at the butcher's block brought him some capital, and Donahoe became the proprietor of the Mint Saloon on Third Street in Marysville. He soon acquired a reputation for geniality, generosity, and public-spiritedness, and his business became "one of the most popular in the city."[58]

Now well on the way to establishing himself in Marysville, Donahoe married Margaret Veronica McKenna, a native of New York City, and she soon bore him two sons, Daniel and Thomas. The Donahoes built a "handsome residence" at the corner of Fifth and C streets in Marysville, and the young couple lived there happily until Margaret's untimely death in 1895.[59]

In the meantime, however, his business prospering and his family securely settled in the house at Fifth and C streets, Donahoe turned his hand to politics. Before much time had passed, he had become "one of the leading spirits of the Democratic Party in Marysville and Yuba County." He chaired the central committee of the party in Yuba County for six years and rose to membership in the state central committee, where he served for eight years. During the presidential election campaign of 1888, Donahoe wagered $1,000 on losing Democratic candidate Grover Cleveland -- certainly clear evidence of his faith in the party and also of his rising fortunes.[60]

In 1891, Donahoe tried for public office, running for councilman in Marysville's third district. The election was reported as one of the most orderly in the history of the city, almost completely lacking in "coin influence," and with both the front and back doors of every saloon in the city closed. The latter condition, it was said, had never before been obtained in a Marysville election. The sober voters of the city, however, elected a straight Republican ticket. Although he was the highest vote-getter among the Democrats, Donahoe failed in his bid for a council seat, defeated by the narrowest margin.[61]

In contrast to Donahoe's fortunes in politics in the early 1890s, his business interests appear to have flourished. The Mint Saloon expanded to a second location at 54 and 56 High Street, and active management of the business was turned over to Donahoe's brother-in-law, Thomas A. KcKenna, probably in 1891. Donahoe apparently devoted his time to his "various property interests" and to the business of the Northern California Bank of Savings, of which he was a director.[62]

In 1896, Sheriff S.E. (Sam) Inlow of Yuba County died in office, and the board of supervisors appointed Donahoe to fill out the term from October, 1896, until January, 1899. In 1898, Donahoe put his name before the electorate, attempting to win the office of sheriff in his own right. Once more the voters rejected him, and he did not run for public office again.[63]

In 1903, Donahoe sold the Mint Saloon to his brother-in-law Tom McKenna and moved with his second wife, the former Catherine A. (Katie) Kearns (or Kerns) of Sutter County, and his six children to San Francisco.[64] The Donahoes took up residence at 2929 Clay Street, and Dan opened a saloon called the Defender on Market Street.[65] Within a year, however, Daniel Donahoe was stricken by an illness; he died on January 17, 1905.[66]

Duffy's Pure Malt Whiskey

Five bottles for this product were recovered from an early twentieth-century deposit. They are round and nearly neckless fifths of amber glass. Made in two-piece molds, they have barely-sloping-collar finishes and are embossed "THE DUFFY MALT WHISKEY COMPANY/ROCHESTER N.Y." in a circle around the company monogram (Fig. 9). The bases are embossed "PAT$^{\underline{D}}$. AUG. 24/1886."

According to Wilson and Wilson, Duffy's Malt Whiskey was first sold in 1884, by the Walter B. Duffy Distilling Co., located in Rochester, N.Y., and Baltimore, Maryland. The firm was part of a liquor empire originating in Rochester and built primarily on the sale of fortified wines.

A grocer since the 1840s in Rochester, Edward Duffy was operating a liquor store in 1857 at 248 State Street and advertising as an importer of "WINES, LIQUORS, CORDIALS & CIGARS, also Rectifier of Whiskey, Refiner of Cider and Manufacturer of Pure Cider Vinegar."[67]

In 1863, the firm was listed under the name of Walter B. Duffy, who was living with Edward that year at 342 State Street. In 1864 Walter moved operations to the State Street address, while Edward made his residence at 78 Lake Avenue. However, from 1866 to 1868, the firm was located at 342 State Street and 5 White Street, under Edward's name.[68] In 1870, the company had been renamed Walter B. Duffy & Co., located at 8 White Street. William Donoghue, living in 1870 with Edward Duffy at 78 Lake Avenue, was associated with the firm from that year until about 1876, when he moved to Virginia City.[69]

Figure 9. Liquor bottle: Duffy's Malt Whiskey.

During this period the company's growth was reflected in directory advertisements. According to an ad in 1875, a 50-by-132 ft brick building was erected in that year "for the exclusive manufacture of CIDER and VINEGAR." Full-page illustrations of company buildings accompanied listings of the firm's products: cigars, vinegar, imported wines and liquors; and alcohol, malt, wheat, rye, and bourbon whiskeys distilled and rectified at 8, 10 and 12 White Street.[70]

At this time Duffy was supplying the "high wines" and grain alcohol for patent medicine mixtures. By 1886, the firm had introduced Duffy's Malt Whiskey, and changed its own name to the Duffy Malt Whiskey Co. A major emphasis in its advertising campaign was the assertion that the product had curative properties. In Baltimore, where the company had a branch in the late 1880s, the directory carried advertisements for Duffy's Pure Malt Whiskey:

> Cures DYSPEPSIA AND INDIGESTION...Price One Dollar per Bottle ...CURES MALARIA...is found to contain No TRACE OF FUSEL OIL OR ADULTERATION...CURES HABITUAL DRUNKENNESS...is the only PURE STIMULANT for AGED PEOPLE, and WEAK and DEBILITATED WOMEN...is an absolute Cure of CONSUMPTION, HEMORRHAGES, and all WASTING DISEASES...is the only PURE STIMULANT for the sick, INVALIDS and CONVALESCING PATIENTS...is prescribed by all PHYSICIANS; and is in use by all HOSPITALS, CURATIVE INSTITUTIONS and INFIRMARIES.[71]

When the federal government initiated a proprietary medicine tax in 1898, the whiskey was included on the patent medicine list, thus making the company liable for $10,000 in taxes. Subsequently, the firm marketed the liquor as "the only whiskey recognized by the government as medicine," until about 1905.[72]

The company's medical claims eventually brought it into a revealing confrontation with the government when a New York druggist was arrested for refusing to pay the state liquor tax on the product. The druggist argued that Duffy's Malt Whiskey was a medicine rather than a liquor, and the company testified that it added fluid extracts (quantity undisclosed) of calumba, hydrastis (golden seal), pareira and taraxacum (dandelion) to the preparation -- an assertion substantiated by several Rochester physicians. Government chemists, however, testified that the product contained no additives in amounts sufficient for chemical detection, other than sugar and coloring.[73] Not only had the product no detectable medicinal properties (other than those of alcohol), but it was not even particularly commendable as whiskey:

> It is whiskey of a very poor quality as a beverage...it is not whiskey which, according to the pharmacopeial standard, has been aged... The taste of this bottle is indicative of a rather poor quality of whiskey, what is known as young whiskey or raw whiskey; it has not the full flavor and aroma of an aged whiskey.[74]

The court decided against the defendant, and the decision was reaffirmed on appeal.

In 1906, the Rochester directory listed the Duffy Malt Whiskey Co., the Rochester Distilling Co., and the New York and Kentucky Co., with Walter B. Duffy as its president, at Lake Avenue and White Street in Rochester. The firm, which had expanded from its earlier address to take over much of the block, was still selling Duffy's Pure Malt Whiskey. By 1917 Henry J. Naylon was the president of Duffy Malt Whiskey

Co. and William Naylon was associated with the Rochester Distilling Company. Walter B. Duffy was no longer listed and had possibly been bought out. None of the companies were listed in 1921; since Duffy's Malt Whiskey had been classified by the Commissioner of Internal Revenue in 1917 as an alcoholic medicinal preparation which could not be sold except by licensed liquor retailers, we assume that both the product and the enterprise fell victim to Prohibition.[75]

Fleming's Export Pure Rye

This small (3 in tall, holding less than 2 oz), square clear glass bottle was made in a two-piece mold and has a lady's-leg neck and an applied bead lip. The vertical embossing on two opposite sides reads "FLEMING'S / EXPORT / PURE RYE // BOTTLED / EXPRESSLY / FOR / FAMILY USE" (Fig. 10).

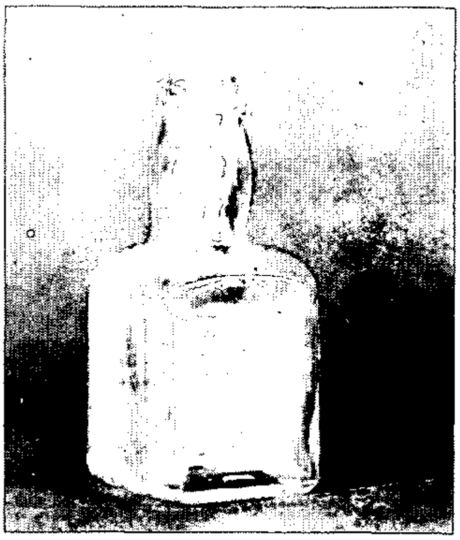


Figure 10. Liquor bottle: Fleming's Export Rye.

Wilson and Wilson date bottles labeled "Fleming's Export Pure Rye" around 1900 to 1906 and assign specimens such as the present one to 1907 to 1915. The rye was possibly produced by Joseph Fleming, a druggist from 1856 to 1920 in Pittsburgh, Pennsylvania, who marketed Pure Malt Whiskey from about 1890 to 1900 and 1905 to 1917. The Wilsons are unclear on the connection between the rye and Joseph Fleming, and information in the Pittsburgh directories does not establish a link.[76]

Gilka Kümmel

The three bottles for this product are octagonal 32-oz vessels of amber glass, apparently made in a two-piece mold. Each has an annular finish and is embossed on the base with the Prussian coat of arms and on two of the side panels with "J.A. GILKA/BERLIN/ Schützen Str. Nº 9."[77]

J.A. Gilka began producing kümmel, a German liqueur flavored with caraway, early in the last century. When the firm first began exporting to the United States we do not know, but their product was "commended for excellent quality" at the Centennial Exhibition at Philadelphia in 1876. This brand was advertised in California (at $1.25 per bottle) from shortly thereafter until the beginning of World War I.[78] The firm is still in business, though now located in Hamburg.

van Hoboken Gin

A. van Hoboken & Co. of Rotterdam is represented in the Old Sacramento collection by seven fragmentary black glass case gin bottles, all from a single turn-of-the-century deposit. These magnum containers seem to be from two-piece molds. They are made with an untooled bulbous annular finish, and some exhibit twist marks on the short neck. Each has a shoulder seal bearing the firm's stylized initials (Fig. 11), and one face of each bottle is embossed "A van HOBOKEN & Cº/ROTTERDAM."

Figure 11. Hoboken Gin shoulder seal.

Antony van Hoboken was born in Rotterdam, the Netherlands, in 1756. Through either extreme precocity or prior family connections, he had established himself in commerce by 1774, shipping butter and cheese to London. He founded A. van Hoboken & Co. in that year as a trading and banking house. In 1788 he took over the business of Hendrik Hesselaar and began trading with the Cape Colony and the Netherlands East Indies. He built his own ships for this undertaking, the crews being provided by the East Indies Company. The real boost for van Hoboken's expanding enterprise seems to have come from the economic disruptions of the Napoleonic wars, his operations during that period consisting more of smuggling than of legitimate commerce, and his profits doubtless increasing accordingly. After 1814, he expanded his operations further, both in the Mediterranean and in the East Indies. In 1825, in partnership with King Willem I of the Netherlands and several other shipowners, he formed a shipping firm which operated successfully for 15 years. In 1831, he became director of the Netherlands Trade Company, a position he held until his death. In 1832, he brought his sons into his own company, which was thereafter styled van Hoboken & Sons. A. van Hoboken died in 1850.[79]

We know little of van Hoboken's interest in the liquor trade, except that his active involvement began in the 1790s with the construction of a gin distillery in Rotterdam, operating at first as the subsidiary firm of Hoboken de Bie & Torley, but soon as Hoboken, de Bie & Co.[80] The company's gin was on the California market by the late 1870s, if not before, and continued to be available at least until World War I. The company went out of business about 1960. The gin retailed during the late nineteenth century at $1.50 to $2.00 per bottle.[81]

The chronology of the bottles themselves has been summarized by Toulouse:

> It is not known when the tapered square bottle was first used, nor whether at that time it bore the applied glass "seal" at one of the shoulder corners. The seal was used about 1848, and may have been as early as 1800. Bottles may or may not have been made without the shoulder seal, using a glass-tipped pontil and leaving a pontil scar, before 1848. Bottles having the seal were definitely made beginning about 1848 and until 1897, having no pontil scar since they were held in a snap for the finish tooling. The finish was a laid-on ring until machine-making started. Thus a bottle with a laid-on ring and marked with the full name and city would be between 1897 and about 1910 (assumed as a date when machine-made bottles could have been available). With machine-making the tapered "brandy" finish was used.
>
> Soon after machine-making started the name and city were left off the bottle and paper labels were used, including a circular one on top of the cork.
>
> There is some indication that the shoulder corner "seal" was not abandoned when the full name and city lettering were added to the sides of the bottle, since bottles are known having both forms of identification. Also, a very few bottles are known having only the word "HOBOKEN" on the side.[82]

Kane and O'Leary Whiskey

Only a very small fragment of a thin-walled round amber bottle with a few embossed letters represents this firm, but the piece is distinctive enough to associate it clearly with a bottle embossed "KANE, O'LEARY & CO./221 & 223/BUSH ST. S.F.," illustrated by Wilson and Wilson.[83]

Michael Kane may have arrived in San Francisco as early as 1859, although it is difficult to trace precisely his whereabouts prior to 1869, as numerous Michael Kanes were listed in the directories and the residences of these men were constantly changing. In 1869, Michael Kane was a member of the firm Hunter, Wand & Co., importers and wholesale distributors of wine and liquors at 607 and 609 Front Street. During 1871, James Hunter left the firm which he had founded, and Kane bought his share, becoming a senior partner in the business, subsequently styled Wand, Kane & Co. In 1874, Charles C. Kane also was listed as a member of the firm.[84]

In 1875, Charles and Michael Kane apparently bought out Wand and took another partner, Fergus O'Leary.[85] Kane, O'Leary & Co. took over the Front Street establishment and continued the business of importing and wholesaling wines and liquors. Charles Kane seems to have dropped out of the firm about 1878, and Max Gruenberg replaced him. Two years later, the firm had four members: Kane, O'Leary, Gruenberg, and the most recent arrival, Myer J. Newmark. By 1882, Kane, O'Leary & Co. had moved to 221-223 Bush Street. About 1883, the firm was dissolved and the junior partners, Gruenberg and Newmark, formed Newmark, Gruenberg & Co., which continued to operate until the turn of the century.[86]

When Kane and O'Leary left the company, both men had apparently acquired a sizeable fortune, which they began to invest. Beginning in 1883, both men were listed as capitalists in the directories, although no indication was given as to the nature of their investments. In 1898, Fergus O'Leary disappeared from the San Francisco directories, and six years later Kane followed him, no further mention being made of either man.[87]

Livingston's Blackberry Brandy

This 22-oz amber bottle was made in a four-piece mold. It has a sloping-collar lip and an indented base with an embossed eight-point star or asterisk design. The embossed label reads "LIVINGSTON'S/PURE/BLACKBERRY BRANDY/DISTILLED/FROM THE BERRY" (Fig. 12).

Louis J. Livingston arrived in San Francisco about 1863, and was first listed as a dealer in "groceries and liquors." In 1864, he joined with P.J. Hickey; they were importers and jobbers in wine and liquor, Livingston apparently having left the grocery business. This was a short-lived enterprise. In 1866, Hickey sold out his interest to Isaac Levy. The new firm was called Livingston & Co.[88]

Livingston & Co., originally located at 221 California Street, was listed in 1869 at 222 California Street and, in 1871, at 220-222 California Street. In 1873, Abraham P. Williams joined with Levy and Livingston, followed in 1875 by a fourth member of the firm, Joseph May. Livingston & Co. seems to have prospered. In 1877, Louis Livingston was able to move to Frankfort, Germany, where he resided until his death about 1895. The firm was in business at 25 Fremont Street from 1883 to 1895, when it was relocated to 206 Davis Street.[89]

In 1895, Edward May, Joseph's son or brother, replaced Isaac Levy. May and a new member of Livingston & Co., Jacob Wertheimer, were listed as the sole proprietors of the firm. In 1904, Edward May died, and Wertheimer left the firm, turning over the proprietorship to Edward's widow, Mrs. Margaret C. May, and Joseph E. Miner. In 1907, Miner was listed as a salesman with the company; apparently he had not remained in the firm's management.[90] With the arrival of Prohibition, the importation and wholesale distribution of liquors became an anachronism, and Livingston & Co. ceased operation. Its final listing, in 1918, mentioned only "office, 1285 Oak Street," which was also Margaret May's residence.[91]

Figure 12. Liquor bottle: Livingston's Blackberry Brandy.

London Jockey Clubhouse Gin

Three fragmentary bottles for this gin are present in the Old Sacramento collection. Of green or olive glass and made in two-piece molds, these square fifths are embossed vertically on two faces "LONDON/JOCKEY/CLUBHOUSE/GIN," while a third face is embossed with a running horse and rider.

This gin was imported, and probably bottled, by A.E. & C.E. Titon of New York. It was being sold in California by 1859, and continued to be popular into the 1870s.[92]

Old Cognac

Only a single clear glass shoulder seal (Fig. 13a) represents this product.

Judging from the fact that this seal is clear glass, in English, and does not include a merchant's name, it is a fair assumption that the product it graced was neither old nor cognac. The counterfeiting of French liquors was a common element of American home industry in the middle of the last century, and we have no means at present of associating this seal with any particular bottler.

Old Valley Whiskey

The Old Sacramento example of this amber oval whiskey bottle is only a side fragment bearing the embossed legend "OLD VALLEY WHISKEY." Complete bottles exhibit above this a cross with the initials G, F, Mc, and M in the various arms, surmounted by the letters AAA. The first two initials presumably represent two of the brand's agents, Gerichten and Fenkhausen, but the latter two initials are of unknown significance.[93]

Old Valley Whiskey was produced by one of Kentucky's oldest distilleries and was famous throughout the United States. The brand was distributed in San Francisco by various companies bearing the name of Amandus Fenkhausen until 1895, and thereafter by Luke Marisch and Company.[94]

Amandus Fenkhausen was in the wholesale wine and liquor business on Montgomery Street in 1861. Charles P. Gerichten joined the firm by 1868, and the name was changed to Fenkhausen and Gerichten. In 1871, the company had expanded its operations to include the manufacture of Star of the Union Bitters. Gerichten left the firm by 1873.[95]

The company became known as Fenkhausen and Braunschweiger in 1875 when Herman Braunschweiger joined, but by 1882 that partnership had been dissolved.[96] In that year, Caesar J. and Rudolf T. Fenkhausen, Amandus' sons, were listed with him as associated with Amandus Fenkhausen and Co. After 1882, the firm was listed as "sole agents Old Pioneer Bourbon Whiskey," and it is not clear if it continued to handle the Old Valley brand. The name Amandus Fenkhausen & Co. continued in use after 1890, although Amandus was not listed after 1886. It is probable that he died in 1886 or early 1887.[97]

After 1895, Old Valley was distributed by Luke Marisch and Company. Until 1905, Louis C. Schalck was in business with Marisch. By 1910, Marisch's enterprise had become Luke's Cafe.[98]

E. Pernod Absinthe

Swiss absinthe is represented in the Old Sacramento collection by several shoulder seals, varying slightly in style but all with the identical embossing, "E. PERNOD A COUVET" (Fig. 13b). Only one of the seals remains attached to the upper portion of a bottle. This is a green wine-like neck with prominent twist marks; the finish exhibits a sheared and fire-polished lip with a rounded band of glass laid on just below the lip. Both lip and band are still covered by remnants of a foil seal.

The formula for absinthe was developed about 1790 by Pierre Ordinaire, a French physician who had fled to Switzerland after the French Revolution in 1789. The contents and strength of absinthe varied among producers, but an essential ingredient was wormwood (Artemesia absinthium). This herb was then popular as a stomachic tonic and was believed to have antihelminthic and even antimalarial properties. Also usual in the liquor was an extremely high alcohol content, commonly reaching 140 proof.

In 1897, Ordinaire's formula passed by marriage to Henri Louis Pernod, who established a small factory in Couvet to manufacture the liquor, to which he gave his name.[99]

In order to expand his operations and avoid import duties, Pernod entrusted one of his sons, Louis, with setting up a second and larger factory in France, and the Société Pernod Fils was created in Pontarlier in 1805. In July, 1829, the elder Pernod followed Louis to Pontarlier, leaving the Swiss operation at Couvet to his other son, Édouard.

This change in operations was facilitated by a contract in which Édouard Pernod agreed not to compete with his father and brother on the French market. Consequently, he began bottling absinthe under his own name, looking, as his business expanded, for new markets. His first exports to the United States were made in 1835. Although his product was probably among the earliest supplies shipped to the newly discovered California gold fields, most journals, advertisements, and shipping records refer merely to "Swiss absinthe." Market records do note it by name, at $16 per doz bottles, in the mid-1850s and it retailed for about $1.50 per qt later in the century.[100] After Édouard's death the plant in Couvet and the E. Pernod trademark reportedly lasted until 1897, when operations ceased in Switzerland. Since the bottled product continued to be available in the United States until 1909, however, either this information is in error or the trademark was appropriated by another producer.[101] Production of absinthe was banned in Switzerland in 1908.

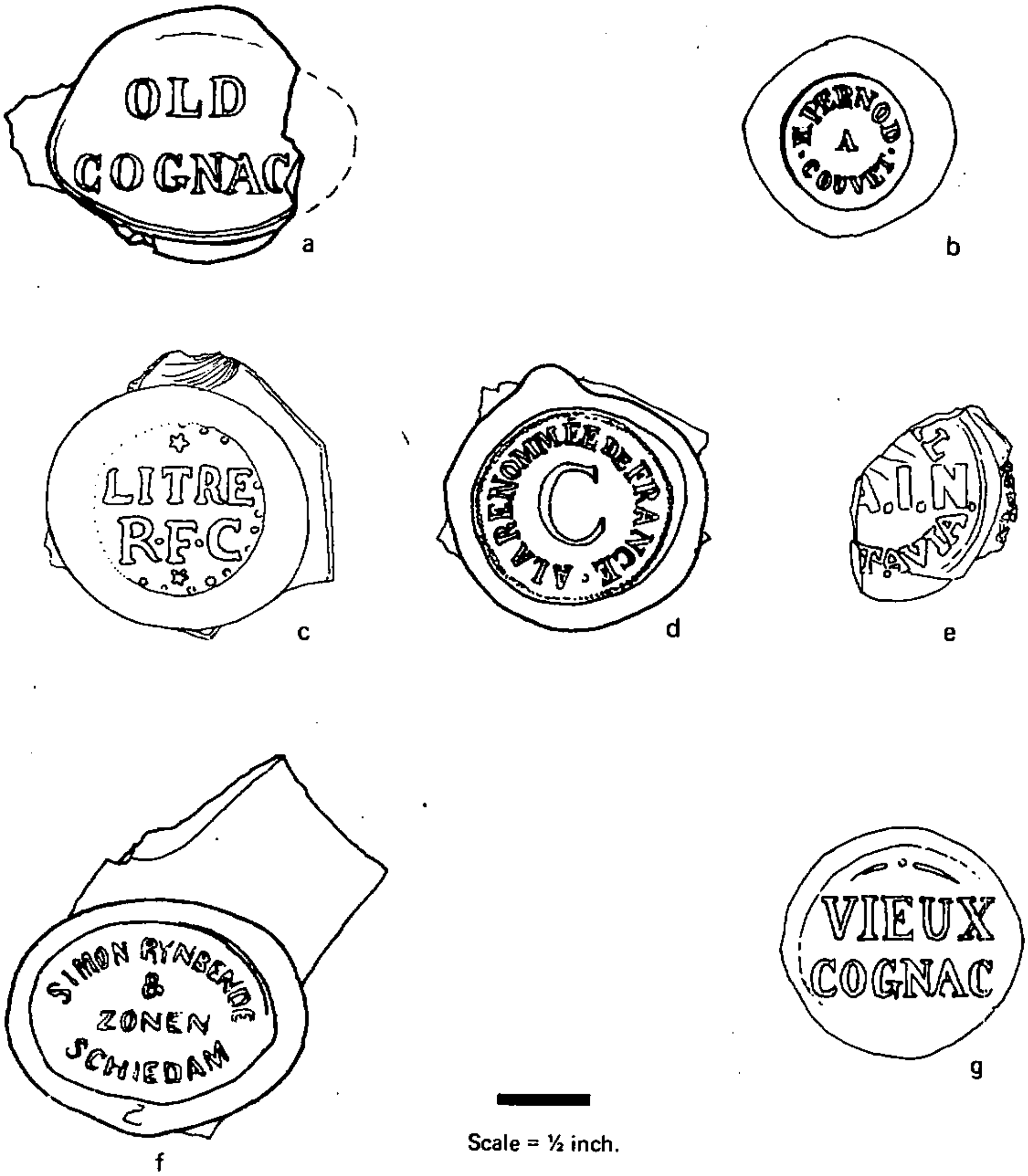


Figure 13. Shoulder seals from liquor bottles: a) Old Cognac; b) E. Pernod absinthe; c) Litre R.F.C.; d) A la Renommée de France; e) Royal I.A.I.N. Batavia gin; f) Rynbende gin; g) Vieux Cognac.

The French business, meanwhile, was continuing under the name Pernod Fils, and was even more successful. According to legend, the real popularity of absinthe began with its use by the French army as a preventative against malaria during the Algerian campaign of 1844-1847. Returning soldiers popularized it throughout France, and its use increased greatly, especially in Paris and other urban centers, where it was adopted particularly by artists and intellectuals.[102]

As absinthe consumption increased, the damaging effects on the nervous system from its habitual use became widely known, but this seems to have had little effect on its popularity. Consumption of the liquor in France doubled between 1894 and the turn of the century, reaching an annual volume of 10,000,000 l. Pernod Fils was the largest manufacturer in the country -- and presumably the world -- at the time, with a daily output of 20,000 l.[103] Although various attempts were made to interdict this trade, it was not until the outbreak of World War I that fears about the effect of absinthe on the troops led to effective legislation. In 1915 the manufacture and sale of the liqueur was banned in France.[104]

In the succeeding years, Pernod Fils developed an anise-flavored liqueur which retained much of the taste of absinthe, without side effects. This liqueur was approved by the French government in 1922, and has been produced under the name Pernod ever since. After mergers in 1926 and 1928, the French firm became known as Les Établissements Pernod; the name was shortened simply to Pernod in 1959.

F. Peters

An elongated shoulder seal of amber glass embossed "F. PETERS" is pictured in Pritchard's report on the Eagle Theatre excavations.[105] Different writers have suggested that F. Peters bottles held brandy or German bitters, but no evidence has been provided for either suggestion.[106]

R.F.C

A single shoulder seal of pale olive green glass, marked "LITRE/R.F.C" (Fig. 13c), indicates this product. It may have been cognac.

A la Renommée de France, C

A single shoulder seal of olive green glass (Fig. 13d) bears this designation, which is of uncertain significance. Possibly it represents a cognac.

Royal I.A.I.N. Batavia

Fragments of two clear glass bottles, including a single shoulder seal (Fig. 13e), were recovered from a turn-of-the-century trash deposit to represent this product. The bottles were made in a two-piece, cup-bottom mold with a sloping-collar finish.

Both the name of the product and the design of the bottle were registered as trademarks by Charles Meinecke & Co. of San Francisco in 1887:

> Every bottle containing the Genuine "Royal IAIN Batavia Gin" as manufactured for us by Mr. I.A.I. Nolet at Schiedam, Holland, and as sold by us, is blown and made of perfectly white and transparent glass, square and tapering of shape about 11-1/2 inches high including the neck and about 4 inches square at its greatest width, holding about 0.38 to 0.39 American Gallons of Gin each... Every bottle...has blown or pressed upon one corner of its shoulder a raised seal in white transparent glass with the devise in raised letters, marked No. 2 in the exhibit hereto.[107]

Exhibit "No. 2" in the trademark application is the model of the present shoulder seal. The new bottle design, of course, was simply a case gin bottle made of clear, rather than black, glass in order "to show the perfectly white and pure color and quality" of the gin.

Charles Meinecke first appeared in the San Francisco directories in 1860, as a commission merchant and importer of foreign wines and spirits. He seems to have operated on his own for the following decade, but in the early 1870s formed Charles Meinecke & Co. By 1887, when Royal I.A.I.N. was trademarked, Meinecke was the sole surviving partner of the firm.[108]

In 1900, Charles Meinecke & Co. were located at 314 Sacramento Street in San Francisco. Henry Kunz was associated with the firm, which imported foreign wines, brandies, and champagne, and acted as agents for American whiskies and gins. Mrs. Charles Meinecke was active in the firm in 1905, although she was residing in Europe at the time.[109]

By 1915, E.P. Meinecke had joined Henry Kunz in running the firm. The listing for the company in the San Francisco business directory of 1920 described it simply as "importers and exporters," showing, no doubt, the effects of Prohibition on the nature of the firm.[110]

J.A.J. Nolet, meanwhile, was a prominent Dutch distiller. His Game Cock Gin had been sold by Meinecke & Co. at least since 1874, and his "gin of a pronounced flavor, and of good quality in general" was exhibited at Philadelphia in 1876. The firm still operates in Schiedam.[111]

Royal I.A.I.N. Batavia, available in both black glass and clear glass containers, retailed for $1.50 to $2.00 per bottle. The product was on the market until the advent of Prohibition.[112]

Rynbende & Zonen Gin

This product is represented by two black glass shoulder seals bearing the embossing "SIMON RYNBENDE/&/ZONEN/SCHIEDAM" (Fig. 13f), from case gin bottles with crudely applied sloping-collar finishes.

Simon Rynbende began producing gin at Schiedam in the Netherlands in 1769. We have no information on when this product was first exported to the United States, but Rynbende & Zonen were shipping it to California by 1858 under the brand name "Steamboat Gin." It continued to be available locally, under the same appellation, for at least two decades thereafter, and in Europe until fairly recently. The bottles, however, were machine-made after 1925. Rynbende & Zonen merged with another Schiedam firm, the J.H. Henkes Distilleries (which had been founded in 1824) to form Henkes Verenigde Distilleerderijen B.V. about 1972.[113]

Vieux Cognac

Two shoulder seals of olive glass bear this embossing (Fig. 13g).

Since no merchant's name is found on the seal, the fact that the embossing is in French does not necessarily indicate the origin of the product. Fratelli Branca of Milan made a "Cognac Vieux Superior" at the turn of the century, and we may assume that English and American distillers were as bilingual as Italian ones when there was a profit in the label.[114]

Voldner's Schnapps

Bottles of this brand of Holland gin are square 20-odd-oz containers of dark olive green glass embossed vertically "VOLDNER'S AROMATIC SCHIEDAM SCHNAPPS." Five broken specimens are present in the collection.

We have no knowledge of the origin of this product, or of when it was first marketed, but local advertisements indicate that Voldner's schnapps were being sold in Sacramento by 1857. One 1860 notice by Voldner's agent for California, S.C. Shaw at 138 Front Street, announced the arrival of 2,000 cases.[115]

Udolpho Wolfe's Schnapps

Nine examples were recovered of containers for this brand of Holland gin. They, like Voldner's, are square Hostetter-like bottles of dark olive green, or occasionally amber, glass embossed vertically "UDOLPHO WOLFE'S // SCHIEDAM // AROMATIC SCHNAPPS" (Fig. 14). They are made in a two-piece mold and have a sloping-collar finish.

Figure 14. Udolpho Wolfe's Schnapps.

Udolpho and Joel Wolfe, probably Udolpho's father, were listed as merchants in the 1837 New York City directory. Three years later, the two men were listed as importers at 4 New Street. Whether this listing represented a real change in their business is unclear; however, they continued to be so listed for many years thereafter. According to an 1869 advertisement, Wolfe introduced the Aromatic Schiedam Schnapps to the American public prior to 1849. Joel Wolfe apparently retired from the firm about 1853 or 1854 and was subsequently listed as "late imp[orter]" in the directories.[116]

Wolfe's Aromatic Schiedam Schnapps was described as a "medicinal gin," very high in alcoholic content, with herbs and other flavorings added to provide its "medicinal" effect.[117] Advertisements for the potion claimed that it was manufactured by Wolfe at his own factory in Schiedam, Holland, from barley of the finest quality and "the aromatic juniper berries of Italy," and that

> In Gravel, Gout, and Rheumatism, in obstructions of the Bladder and Kidneys, its effects are prompt, decided, and invariably reliable... [I]n cases of dropsy, gravel, obstructions of the kidneys, diseases of the bladder, stricture, dyspepsia and general debility it is recommended most emphatically by the most distinguished members of the medical profession.[118]

The liquor (its actual category) was one of the first brand names distributed on the West Coast with the label embossed in glass. The Aromatic Schiedam Schnapps arrived in California about 1852, as Udolpho Wolfe began to expand his markets. In 1861, Wolfe's Aromatic Schnapps trademark was registered with the State of California; the company was among the first ten to file after passage of the enabling legislation for trademark registration.[119] During the last quarter of the century, if Wolfe's claims and the frequency of his product's appearance in trade catalogs and mercantile price listings are any indication, this must have been one of the best-selling gins in the market, retailing at $1.00 to $1.20 for "quarts" and about 50¢ each for "pints."[120]

Udolpho Wolfe continued to operate his New York City business until 1869 or 1870, when he moved to New Orleans, leaving his son, Joel B. Wolfe, in charge of the New York operation. In 1875, Udolpho Wolfe & Co. was first listed in the directory, and four years later the firm was styled Udolpho Wolfe's Son & Co. About 1898, the firm moved its headquarters from Beaver Street, where it had operated for half a century, to 21 State Street.[121]

Between 1911 and 1915, the firm established by Udolpho Wolfe and run by his family for 60 years, left the family's control and was incorporated under new management. The Udolpho Wolfe Co. was subsequently listed as an importing firm with Charles Snead as president and Jonathan Thorne, treasurer. By 1922, James Clark and Louis O. Condit were listed as president and treasurer, respectively, and the corporation had moved to 19 Cedar Street. While the firm continued to be listed in the directories as "importers," the onset of Prohibition must have drastically cut into their liquor business. Possibly they continued to import alcoholic substances for use in the prescription drug trade, but it seems more likely that they began to deal in other lines. By 1932, the Udolpho Wolfe Co. had disappeared from New York, and there is no evidence that they continued to exist thereafter.[122]

Endnotes

1. Rorabaugh 1979:232.
2. Winkler 1968.
3. Helper 1855:63-64.
4. Borthwick 1948:56-58.
5. Ostrander 1957.
6. Nordhoff 1873:42.
7. Helper 1855:65-68.
8. Walker 1880:193; San Francisco Chronicle Dec. 8, 1883:1; Our Commercial Traveler and Prices Current (Wm. Cluff Co., San Francisco) April 1, 1901:27.
9. See for example Wilbur 1892:36 and Crocker Co. 1897:1159.

10. H. van Geem, Produktschap voor Gedistilleerde Dranken, Schiedam, personal communication.

11. Switzer 1974:13, 15.

12. Goldberg, Bowen & Co. 1903:30-31; H. van Geem, personal communication.

13. Goldberg, Bowen & Co's Monthly Price Current (San Francisco) July 1900:14; Osborn 1906:91. According to information from V.E.B. Nordbrand Nordhausen, Kornschnapps was not a common local term, the designations Bornewyn, Branntewyn, or Kornbranntewyn being used instead. The present product, consequently, may have been bottled elsewhere.

14. Wine Dealers' Gazette April, 1876:1.

15. Abernethy 1825.

16. California State Archives, Trademark Application No. 208, filed Sept. 15, 1871; Wine Dealers' Gazette April, 1872:1; Langley 1869:148, 1872:154.

17. Wine Dealers' Gazette Feb., 1877:4.

18. Wine Dealers' Gazette July, 1876:4.

19. Wine Dealers' Gazette April, 1872:2, July, 1873:4, Jan., 1874:4, Aug., 1874:2.

20. Wine Dealers' Gazette Nov., 1873:2; Langley 1875:185, 1878:202.

21. Francis, Valentine & Co. 1880:845, 1881:876; Wilbur 1890:1228, 1891:1283, 1892:1618.

22. Wilbur 1894:1321; Painter 1895:1387; Crocker Co. 1896:1148.

23. Crocker Co. 1897:1254, 1898:1220, 1899:1262, 1900:1258, 1905:1352; cf. Pacific Wine and Spirit Review May 31, 1904:9. The labels referred to are paper; whether the bottles illustrated in these ads are embossed is not discernible (cf. Fig. 5).

24. Cf. Crocker Co. 1906-1910, 1915, and 1920.

25. Crocker Co. 1907:1175, 1908:1296, 1910:1246, 1915:1390, 1920:1175.

26. The historical account is based largely on information supplied by Bénédictine S. A., Fécamp.

27. Hannum and Blumberg 1976:163-164; and information from Bénédictine.

28. La Lune Nov. 25, 1866:4.

29. Maurice Yvart, Curator of the Bénédictine Museum, Fécamp, personal communication. According to Wilson and Wilson (1968:31), Bénédictine was first distributed in the American West by Henry Schroeder and James DeFremery. Roth & Videau of San Francisco were advertising in 1871 as the "importers and sole agents" for the product, which was "put up by European monks, and much sought after here and in Eastern cities" (Wine Dealers' Gazette Nov., 1871:3). It retailed in the last century for about $2.00-$2.50 per "quart" and $1.15-$1.35 per "pint" (Lebenbaum & Co. 1879:9; Goldberg, Bowen & Co's Monthly Price Current San [Francisco] Jan., 1897:16, July, 1900:14).

30. <u>La Lune</u> Nov. 25, 1866:4 and Maurice Yvart, personal communication. Wilson and Wilson (1968:31) date bottles such as ours from ca. 1882 to 1917, but on what basis is unclear. For Bénédictine ads picturing bottles of this style see Osborn (1906:61) and Harper & Co. (1920:382).

31. California State Archives, Trademark Application No. 162, filed April 4, 1870.

32. Langley 1871:270.

33. Langley 1872:267; Markota and Markota 1971:11.

34. Markota and Markota 1971:11; Langley 1875:269, 1876:289.

35. Cf. Wilson and Wilson (1968:54) for an illustration of a complete bottle.

36. Langley 1871:191; <u>Wine Dealers' Gazette</u> Oct., 1871:2.

37. Phelps 1882:284-285.

38. For E. Martin & Co.'s J. H. Cutter bottles, see Wilson and Wilson (1968:54).

39. <u>Wine Dealers' Gazette</u> Oct., 1871:2, Sept., 1873:2.

40. <u>Wine Dealers' Gazette</u> Nov., 1873:1; Francis, Valentine & Co. 1881:614; Crocker Co. 1899:1114.

41. Crocker Co. 1900:1123, 1905:1208; Wilson and Wilson 1968:55.

42. Wilson and Wilson 1968:57.

43. Information in California State Archives, Trademark Application No. 567, filed Dec. 12, 1879; also cf. Tanner 1859:60, 167.

44. California State Archives, Trademark Application No. 23, filed May 12, 1864, No. 567, filed Dec. 12, 1879. Edwards 1869:212, 280, 1870:57, 159, 252; <u>Wine Dealers' Gazette</u> Oct., 1871:2, Aug., 1874:3; <u>Pacific Wine and Spirit Review</u> Mar. 15, 1891:13.

45. Rivers 1854:72; Colville 1856a:104; Phelps 1881:305; Murray 1891:213-214.

46. Langley 1860:148, 1867:223, 257; Phelps 1881:307; <u>Wine Dealers' Gazette</u> May, 1874:3; <u>Merchant and Viticulturist</u> Jan. 8, 1890:4.

47. <u>Wine Dealers' Gazette</u> May, 1874:3. Bottles embossed "J. H. Cutter, Old Bourbon" and "J. H. Cutter Pure Old Rye" had been sold by Hotaling as Hardy and Moorman's agent at least since 1872 (<u>Wine Dealers' Gazette</u> Sept., 1872:2).

48. <u>Mida's Criterion</u> Sept. 30, 1890:25; Wilbur 1891:717.

49. <u>Pacific Wine and Spirit Review</u> Jan. 21, 1895:13, Feb. 28, 1899:22, Mar. 31, 1903:47, Nov. 30, 1903:5, 47, Jan. 31, 1905:64, Apr. 30, 1905:50; Crocker 1900:875, 1905:942; California State Archives, Trademark Application No. 744, filed July 29, 1903.

50. Pacific Wine and Spirit Review July 31, 1904:26, April 30, 1919:19.

51. Trow City Directory Co. 1855:207, 1857:211; Wilson and Wilson 1968:59; Mercantile Gazette and Prices Current Apr. 27, 1860:3, Aug. 20, 1860:3-4, Nov. 9, 1860:3.

52. Wine Dealers' Gazette Sept., 1872:3.

53. Trow City Directory Co. 1878:290-291, 1883:373.

54. Cf. Wilson and Wilson 1968:60 for an illustration of a complete specimen.

55. Wilson and Wilson 1968:59.

56. Marysville Daily Appeal Jan. 18, 1905:1, Dec. 30, 1887:3.

57. Marysville Daily Appeal Jan. 18, 1905:1; McKenney 1879:30, 1881:73.

58. Marysville Daily Appeal Jan. 18, 1905:1; Marysville Daily Democrat Jan. 17, 1905:8. His financial record was unfortunately less flattering; an 1884 credit index estimated his "pecuniary strength" at $2,000-$5,000, and his credit rating, on a scale of 1 to 4 (with 1 being best) at 3-1/2 (Dun & Co. 1884:151).

59. Marysville Daily Appeal June 4, 1895:1, Jan. 18, 1905:1.

60. Marysville Daily Appeal Jan. 18, 1905:1; Marysville Weekly Appeal Oct. 15, 1888:1.

61. Marysville Daily Appeal Mar. 20, 1891:1.

62. Rentschler 1892:44; Marysville Daily Democrat Jan. 17, 1905:8; Marysville Daily Appeal Jan. 18, 1905:1.

63. Marysville Daily Democrat Jan 17, 1905:8; Marysville Daily Appeal Jan. 18, 1905:1.

64. Marysville Daily Democrat Jan. 17, 1905:8; Marysville Daily Appeal Jan. 18, 1905:1, Jan. 19, 1905:4; Appeal Publishing Co. 1903:60.

65. Marysville Daily Democrat Jan. 17, 1905:8; Marysville Daily Appeal Jan. 18, 1905:1; Crocker & Co. 1904:582.

66. Marysville Daily Appeal Jan. 18, 1905:1; Jan. 19, 1905:4.

67. Wilson and Wilson 1971:113; Dewey 1857:187, Advertising Section 43.

68. Boyd 1863:23, 185, 1864:19, 109; Waite Brothers & Co. 1866:35, 112; Dewey et al. 1868:131.

69. Drew 1869:71, 1870:67, 69, 1871:79, 472; Drew, Allis & Co. 1873:89, 96, 99-100, 1874:100, 103, 1875:101, 104.

70. Drew, Allis & Co. 1875:637, 1876:594.

71. Woods 1886.

72. Woods 1886:380-86; Tyler 1959:210-11.

110. Crocker Co. 1915:1320, 1920:1124.

111. Wine Dealers' Gazette May, 1874:3.

112. Goldberg, Bowen & Co's Monthly Price Current (San Francisco) July 1, 1891:16, Jan., 1897:16, Oct., 1897:41, Jan., 1902:14; Our Commercial Traveler and Prices Current (Wm. Cluff Co., San Francisco) Apr. 1, 1901:27; Pacific Wine, Brewing and Spirit Review Nov. 30, 1918:13.

113. Mercantile Gazette and Shipping Register Jan. 13, 1858:4; Wine Dealers' Gazette Feb., 1877:1; C.M. van der Linden, Henkes United Distilleries B.V., personal communication. The date for automatic-machine production of the bottles is from Floris Meydam (B.V. Koninklijke Nederlandsche Glasfabriek Leerdam, personal communication), who reports the Rynbende distillery was founded in 1793.

114. Osborn 1906:73.

115. Mercantile Gazette and Shipping Register Sept. 26, 1857:3; Sacramento Bee July 16, 1860:1. Since the Produktshap voor Gedistilleerde Dranken has no record of a Voldner distillery (H. van Geem, personal communication), we are inclined to think this schnapps is not a Dutch export.

116. Longworth 1837:679, 1840:694; Sacramento Union Jan. 1, 1869:1; Rode 1852:769-770. Putnam (1968:43) reports an 1848 ad for "Schnapps Wolfe's Superior Gin."

117. Wilson and Wilson 1968:22.

118. Sacramento Union Jan. 1, 1869:1. Inquiry to the Produktschap voor Gedistilleerde Dranken in Schiedam failed to confirm whether Wolfe did have his own distillery there. The brand name Udolpho Wolfe, however, was used until the 1960s by Blankenheym and Nolet for their schnapps (H. van Geem, personal communication).

119. Wilson and Wilson 1968:22, 153, 1971:146.

120. Cf. Lebenbaum & Co. 1879:8; California Grocer Oct. 1, 1881:1; Redington & Co. 1891:127; Langley, Michaels Co. 1897:127; Goldberg, Bowen & Co's Monthly Price Current July 1, 1891:16, Jan., 1897:16, July 1900:14.

121. Wilson and Wilson 1971:146; Trow 1871:1250, 1875:1444, 1879:1634; Trow Directory Co. 1898:n.p.

122. Trow Directory Co. 1911:1710; Polk & Co. 1915:1966, 1932:1867.

BITTERS BOTTLES

Bitters have had a long career in American and European folk culture. Being compounded of a variety of bitter-tasting herbs (usually including some with carminative properties) in a medium of alcohol, their appeal was undoubtedly tied to the "it tastes awful so it must be good for you" school of self-dosage. They also derived much support from the common belief in the curative powers of hard liquor. They were a home preparation for decades -- perhaps centuries -- before anyone thought to market a particular recipe, and even after America was swamped with million-selling name brands, they were still being made from scratch in some rural communities. According to one report from the Tennessee mountains in the 1890s, for example,

> ...the natural man finds it easy to doctor himself. With "balsam juice," the resinous deposit of the bark of Abies Fraseri, he cures nearly everything, both outside and inside. The virtues of sarsaparilla and ginseng (the Aralias) are understood...The woods are full of poultices and bitter tonics...Unfortunately, the [mountaineer] is apt to have an exaggerated estimate of the medical virtues of "corn juice," which too frequently flows from a moon-light still.[1]

We can find no indication that physicians of the early nineteenth century had any objection to bitters -- many of them even produced their own brands. And most bitters, after all, were simply preparations of botanical drugs, the medical properties of which were amply described in the dispensatories and pharmacopeias of the time.

When bitters were first marketed for public sale is uncertain, but the 1790s household account books of George Washington detail purchases of both "bottle for [homemade] bitters" and "bottles of Bitters."[2] By the middle of the following century commercial production of bitters was well underway, and by the end of the Civil War it had become a million-dollar industry.

The cultural environment which made bitters a potentially profitable commodity, was one of rough-and-ready therapeutics and scant government regulation. It is hardly surprising that the industry attracted both charlatans and critics (the former, apparently, in the greater quantity):

> In the concoction of the various kinds of "Bitters," there is but little else than fraud. Nothing so much as a vegetable bitter disguises the quality of inferior spirits; and nothing so much as alcohol, good or bad in quality, disguises the nature of a vegetable bitter. The veriest fool can manufacture medicinal "Bitters," -- an experiment which has been successfully tried again and again. Nature has been lavish in her distribution of bitter plants. They abound everywhere. Many of them are harmless or positively tonic, and a small proportion only contain noxious qualities. Even the poisonous bitters, such as nux vomica, are bitter beyond proportion to their tonic properties. It is said one grain of strychnia will impart a perceptible bitter taste to a hogshead of water. In the early days of California, when the demand for "Bitters," exceeded the supply, some ingenious manipulator discovered that the "Man Root," or "Wild Cucumber," of our sand-hills (Meharrhiza Oregana), could be made into pure Stoughton Bitters; and thirsty invalids without number drenched themselves innocently with this excellent Stoughton. And yet this root is highly acrid and really poisonous in large quantities.

I have known death to result from its use, through intestinal inflammation. It grows to an enormous size in the sand-hills within the limits of the city [of San Francisco]... There is enough of it on the Pacific Coast to manufacture all the "Bitters" of every name, which goes down the throats of the population. The same might be said of the Yarrow, which is a wholesome bitter. Besides these we have Wormwood, Willow, Dogwood, Sneeze-weed (Helenium), and others, abounding in all directions.

The most noxious, in fact the only noxious product of distillation, excepting always the alcohol itself, is Fusel Oil. It is difficult to separate Fusel Oil from distilled liquors, and its presence in large quantities injures their sale. Such liquors are economically applied to the manufacture of "Bitters." Indeed, there is no product of the still too vile to make "Bitters" of the first quality, in which the inferior and impure spirit is completely disguised. The process is admirably simple. Some child of toil, who has grown weary with wiping the sweat from his brow, buys a lot of the cheapest whisky which the market affords, and steeps in it one or more bitter herbs, which he finds at hand. He gives the concoction a distinctive name, and calls himself "Doctor," though he has never so much as held a doctor's stirrup, or blacked a doctor's boots. If he has a religious turn, so much the better; or if he is altogether knavish, it is none the worse. He proclaims himself the monopolist of a wonderful herb procured from the Modocs or Apaches, and distributes his dilute tinctures to such amiable fools as will give him certificates. Of superior value are the certificates of clergymen -- many of whom are so innocent and credulous as to serve his purpose remarkably well. A few bottles sent to an editor will pay. Perhaps he can find some doctors who will permit him to immortalize them by publishing their names. The rest is plain sailing -- thanks to types and newspapers. His fortune is made, and at the same time a large number of drunkards, who have trained on whisky under a false name.

Druggists have strong inducements to engage in the manufacture of "Bitters." Bitter herbs in great variety and quantity, are liable to accumulate on their hands. In making tinctures and other preparations, large amounts of dregs and refuse matters collect. These sources supply the bitter element, almost free of cost, and sufficient to impregnate immense quantities of alcoholic liquors to the proper standard of medicinal bitters.

The formula then, for medicinal bitters in general, runs thus: Take of cheapest whisky, an indefinite quantity; of any bitter vegetable, herb, flower, root or bark, q.s. Mix, and flavor with anything or nothing. Put in bottles and employ an expert liar to write labels and certificates. Present a few bottles to editors and clergymen of taste. Advertise largely and sell for five hundred per cent. above cost of material.

> This subject is highly important in its moral relations. Medicated bitters are not used like ordinary medicines, in occasional doses. They are repeated day after day, habitually. Composed, as they are essentially, of alcohol, they lead directly, and often irresistibly, to intemperance. The entire spawn of medicinal "Bitters" are little more than lures to drunkenness. It is surprising that respectable apothecaries sell and distribute them -- more surprising still that they originate and invent them. The traffic in medicated "Bitters" is a fraud and a nuisance, calling for legal restraint.[3]

Since the medical profession of the time incorporated its own varieties of dangerous and ineffectual therapeutics, the "call for legal restraint" found few listeners until the turn of the century. At that time, two of the major factors originally responsible for the bitters boom brought about its collapse. First, the medical advances which began accumulating rapidly about the turn of the century, together with the Pure Food and Drug Act of 1906, created an environment in which the wild medical claims of the manufacturers faded rapidly from social favor. The bitters themselves, meanwhile, were replaced in most medicine cabinets by more modern pharmaceuticals against which, for genuine medical effect, they could not hope to compete. (It is also possible that the market for their remaining [and real] role as "an aid to digestion" was diminished by the advances in food storage technology that were taking place at the time.)

Secondly, as alcohol was almost always used as a solvent for the healing herbs, the bitters industry could scarcely hope to escape the growing pressures of the Prohibition movement. Indeed, it is difficult to avoid the notion that most of the early twentieth-century exposés of bitters and other proprietary medicines were inspired as much by the alcoholic content of these products as by any fraudulent curative claims or dangerous side effects.

In any case, a functional classification of bitters is difficult. Many brands were sold over the bar as often as over the pharmacist's counter; yet many were advertised -- and doubtless consumed -- for their supposed effects on disease and disability, or even, as now, merely for their stomachic effects. Thus, they might be grouped either with the liquors or with proprietary medicines. They form a large and cohesive enough collection, however, for consideration in their own right, and we have here so considered them.

Abbott's Bitters

Abbott's Bitters, although apparently one of the oldest brands on the Sacramento market, are represented in the collection only by a single, and very late, specimen. This is an amber, machine-made (and therefore twentieth-century) sixth with a collar-and-ring finish. It is embossed around the shoulder "C.W. ABBOTT & CO./BALTIMORE."

Abbott's Bitters were an early importation to Sacramento; they were advertised by J.L. Polhemus, a local pharmacist, in 1850.[4] The connection of this early product with the later bitters of C.W. Abbott & Co. is somewhat cloudy.

According to the 1873 Baltimore directory, Cornelius Webster Abbott was a clerk with Morning Star Bitters in that city. He shared a residence with Cornelius F. Abbott, possibly his father, who was also associated with Morning Star. In 1875, C.W. Abbott was a bookkeeper with the firm; in 1876, he was listed as a tobacconist. From 1877 to 1879 both Abbotts were again associated with Morning Star, located at that time at 110 South Charles Street, Baltimore, and apparently affiliated with C.F. Abbott & Co. of the same address. C.W. Abbott worked in the chemical laboratory.[5]

In 1880, C.W. Abbott & Co., manufacturing Morning Star Bitters, appeared in the directory for the first time, at 110 South Charles Street. In 1886, the company was listed as a wholesale drug firm, dealing in Angostura Bitters and extracts. By 1893, the company, advertised as "Mnfrs of the original Angostura Bitters," was located at 302 South Charles Street, the residence of C.F. and C.W. Abbott. C.F. Abbott was listed in the directory as a chemist with the firm. He was no longer associated with the business and was probably deceased in 1905, by which time the company had removed to 106 South Charles Street, and C.W. Abbott was making his residence in Mt. Washington.[6]

The use of Angostura Bitters as a brand name led to legal conflicts with J.G.B. Siegert and Hijos (see below). Accounts of the conflict, however, provide our best evidence that C.W. Abbott & Co. was continuing a family enterprise of long standing.

> The General Term of the Supreme Court [of New York] in October, 1893, reversed the decision of the Special Term, which has granted Siegert and Wuppermann [Siegert's American Agent] an injunction restraining Messrs. Abbott & Co. from manufacturing and selling bitters under the name of Angostura Bitters. The decision was a triumph for Messrs. Abbot & Co. The case has not been appealed to the Court of Appeals. The fact that the Siegerts did not appeal, and that they have never brought the case to a trial a second time, seems to furnish conclusive evidence that they must have had a bad case. Some years ago (1881) they sued Abbott & Co. in Maryland and were beaten in the Court of Appeals in that State (1884) upon the ground that their own label was a fraud on the public. After that decision they changed their label so as to tell the truth as to the matter in which the court said they falsified, and then instead of suing Abbott & Co. over again in Maryland, to establish their exclusive right to the word "Angostura," they started a suit here in New York (1888), where none of the parties on either side live, and waited till they happened to catch Mr. Abbott's father in this State, when they served him with the summons. He fought them on the merits that they had no exclusive right to the word "Angostura." It was further proved on the trial that the Siegerts never sold their bitters as "Angostura" bitters until after the time that Abbott's father and predecessor in business sold his bitters under that name. The Siegerts used to call their bitters "Aromatic" bitters. If this suit -- as claimed by the defendants -- was started for advertising purposes, Messrs. Siegert and Wuppermann did not get the right kind of advertising.[7]

Regardless of the question of priority, it seems to be true that Siegert & Hijos made much more consistent and exclusive use of the term Angostura than did the Abbotts, as indicated by the reference to Morning Star and Abbott's bitters as trade names for the latter's product.

The 1909 directory lists C.W. Abbott & Co., Cornelius Abbott, president, as manufacturing Abbott's Bitters. In 1923, Cornelius W. Abbott Jr. was a foreman with the company, which had an expanded street address of 204-06 South Charles Street. Listed in the 1919 directory under Patent Medicines, by 1942 Abbott's Bitters were advertised as "A Condiment for Food and Beverage." C.W. Abbott Jr., by the latter date, had replaced his father as president and treasurer on the company's board of officers. C. Frederick Abbott was listed as vice-president. Subsequently the company dissolved or was absorbed by another firm, and in 1956 was no longer listed in the Baltimore directory, though C. Webster Abbott Jr. was included, associated with the realty firm of E. Randolph Wooton & Co.[8]

African Stomach Bitters

This brand is represented by a single round bottle of yellow amber glass, which originally held 20 oz. Made in a four-piece mold with a tapered collar finish, it is horizontally embossed on one face, "AFRICAN/STOMACH/BITTERS."[9]

These bitters were the product of Spruance, Stanley & Co., a San Francisco liquor-importing and wholesaling firm which showed a stability in operation remarkable in the history of the city's business, remaining at the same location for nearly forty years.

The firm was the successor to J. and J. Spruance Co., founded by James and John Spruance in Folsom in 1862. John Spruance and Cyrus C. Chapman operated a wholesale outlet for that company in San Francisco, where they took over the firm of J.C. Horan & Co.[10] The firm became Spruance, Stanley & Co. after a reorganization in 1872, when Samuel L. Stanley joined John Spruance and Chapman in their wholesale liquor business, at 410 Front. Stanley brought with him a considerable experience in the trade, having been in the wholesale liquor business for many years with Horace Webster. Although Chapman had entered the firm before Stanley, his name was never included in the company's title, and he left the business in 1876 or 1877.[11] Another reorganization brought Charles W. Fore into the firm in 1890, when ill-health forced the departure of Stanley. Until the company went out of business in 1906, however, Stanley's son remained, and the firm continued as Spruance, Stanley & Co.[12]

The firm handled a wide selection of wines and liquors over the years, including Catawba Wine Bitters and the "celebrated" African Stomach Bitters. The company trademarked the latter brand in 1881 (Fig. 15a);[13] we have no idea of the product's contents. Since the collection contains a single bottle, and we have found only one listing for it among contemporary grocery, liquor, and pharmaceutical trade catalogs, we infer that its popularity was limited. African Stomach Bitters were dropped from their long-standing place in Spruance, Stanley & Co.'s advertising in 1898 -- presumably a sign of their commercial demise.[14]

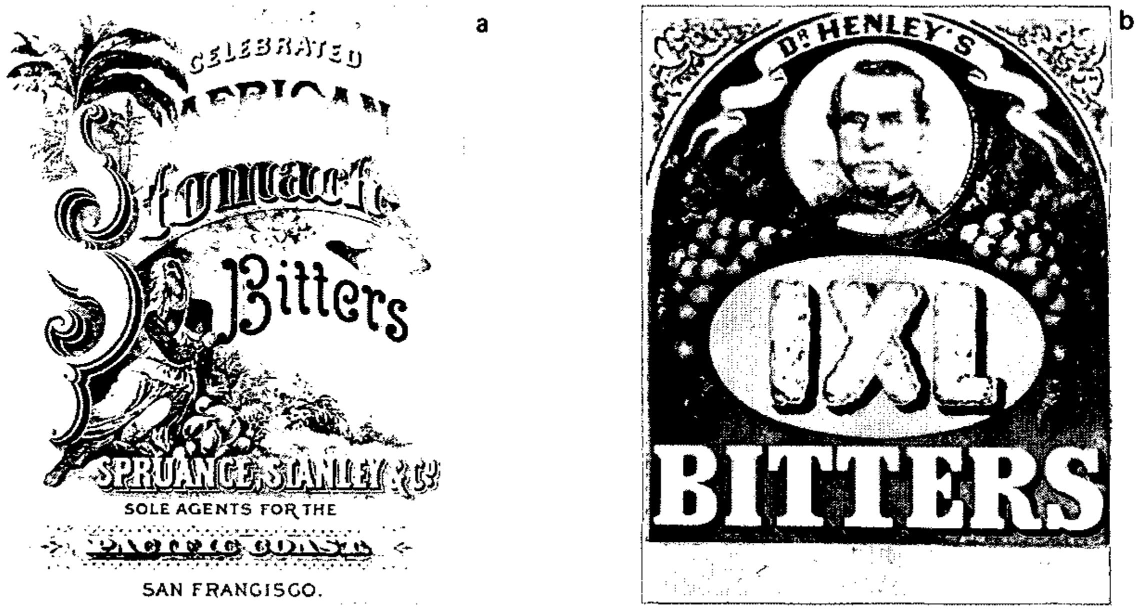


Figure 15. Bitters bottle labels: a) African Stomach Bitters; b) Henley's IXL Bitters. California State Archives.

Berkshire Bitters

The Berkshire Bitters container is one of the most unusually designed bottles in the Old Sacramento collection. Made in the form of a pig (Fig. 16), it is embossed on the sides "BERKSHIRE BITTERS//AMANN & CO/CINCINNATI O." The container is of dark amber glass from a two-piece mold, with what appears to be a marver-rolled applied finish. It held 30 oz.

Anthony Amann was a resident of Cincinnati in 1855, working as a clerk. In 1857, he was also listed as a clerk, but in the following year he and his brother Daniel ran Amann & Bros., a cigar store at 98 East Pearl Street. By 1860, Anthony was living in the outlying town of Newport, but still operating the cigar store, now at 56 Broadway, which was also listed as Daniel's residence. In 1862, Charles Amann, also of Newport, was briefly associated with the business. Anthony did not appear in the 1862, 1864, or 1865 directories, possibly because he was living outside the city. In 1866, he was again listed, living in Covington, a few miles from Newport, and still associated with Amann & Bros. By 1868, Edmund Amann, a resident of Newport, had joined the firm.[15]

In 1869, the Amanns reorganized, under the name of Amann & Co., as liquor dealers at 57 East Second Street. Anthony and Edmund were associated with the firm and shared a residence in Newport. In 1870, J. Henry Stegeman was associated with the firm, which had removed to 98 East Second Street and was operating a distillery. By 1874, Stegeman had dropped from the company, to be replaced by William H. Band. The firm had moved to 59 East Second Street.[16]

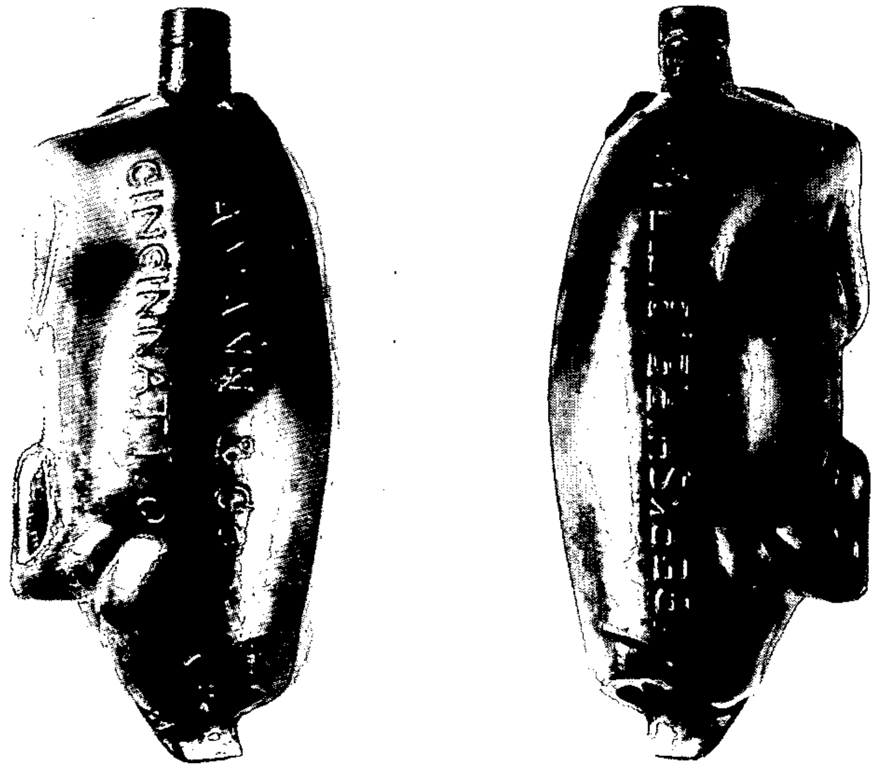


Figure 16. Berkshire Bitters bottle.

In 1881, Charles M. Harris & Simon Peehl were associated with Amann & Co., which had expanded to operate as "distiller, re-distillers, and wholesale liquor dealers." At the same time, Edmund Amann was also working with Godfrey Holterhoff as a distiller's agent at 8 East Second Street.[17]

In 1889, Anthony Amann was listed as the president of Kentucky Bourbon Co., located at the 59 East Second Street address, and presumably the successor of Amann & Co. Edwin Amann, of Newport, was then the secretary and treasurer of Kentucky Bourbon Co., and Edmund Amann was a whiskey broker at 57 East Second Street, probably associated with the company. This information was repeated in the 1891 directory, but there was no listing either for Anthony Amann or for Kentucky Bourbon Co. in 1892.[18]

It is likely that from 1869 to 1885, the period when the Amanns were involved in the liquor business under their own name, the firm capitalized on the popularity of bitters, though there were no references to Amann & Co. in the bitters sections of Cincinnati business directories. Advertisements for the firm did not appear in the directories, and specific information on its products has been unavailable. The disappearance of Amann & Co., the Amanns, and Kentucky Bourbon Co. from the directories after 1891 suggests that the company moved out of Cincinnati or closed, possibly as a result of the economic recession of the 1890s.

Doyle's Hop Bitters

This brand is represented by at least three square bottles of dark amber glass -- two complete and one fragmentary. These 20-oz. containers are panelled on all four faces, with four trapezoidal panels around the shoulder as well. One face is embossed with a hop-branch design, the style of which differs in the two whole specimens. The shoulder panels are embossed "DOYLES//HOP//BITTERS//1872" (Fig. 17a). The finish is a sloping collar above a beveled ring.

In 1872, John D. Doyle first concocted his Hop Bitters and began their production out of his factory in Rochester, New York. The development of this particular formula is apparently the result of Doyle's earlier business as a hops dealer.[19] The major ingredients, and the effects for which they were selected, were detailed in the firm's advertising:

> Hops.
>
> ...The Hop Pillow has long been a popular remedy for producing sleep, and hops have been used with eminent success in the treatment of inflammation of the lungs, stomach and bowels; in pleurisy, painful swellings and tumors, ulcers, salt rheum, wakefulness with nervous irritation, exhaustion in after pains, Intemperance, Drunkenness. In a word, the hop contains more useful medical properties than any other known plant.
>
> Buchu.
>
> It is given chiefly in complaints of the Urinary organs, such as gravel, chronic catarrh of the bladder, morbid irritation of the bladder and urethra, disease of the prostate gland and retention or incontinence of urine, from a loss or [sic] tone in the parts concerned in its evacuation. It is also recommended in dyspepsia, chronic rheumatism, cutaneous affections and dropsy.

a b

Figure 17. Bitters bottles: a) Doyle's Hop Bitters; b) Drake's Plantation Bitters.

Mandrake (Podophyllin).

This plant, like the Hop, is one of the oldest and most renowned of all medicines, having been used by the ancients as an anaesthetic before surgical operations. Its action is more directly on the blood, liver and bowels, correcting any inaction of the liver or bowels.

It has been successfully used, externally and internally, for scrofula and dropsical rheumatism. In large doses, it is an active, painless cathartic. In small doses, it corrects and regulates the action of the bowels, prevents and removes costiveness, producing natural evacuations, and allaying all irritation and laxative tendencies of the bowels.

This medicine has been more used and more relied upon alone by physicians of all schools, for a dinner pill, stomach, liver and bowel regulator, than any other medicine ever used, but its greatest power and effect can only be obtained in combination, and this medicine combined with the others in Hop Bitters has much to do in performing the many wonderful and mysterious cures made by them.

Hop Bitters are not only invaluable as a remedy for all diseases of the stomach, bowels, liver, kidneys and urinary organs; but are of untold value in destroying the appetite for intoxicating drinks and entirely curing drunkenness and that craving, burning thirst for stimulants and opium.[20]

In 1874, after Doyle either died or left town, the Hop Bitters Manufactory came under the proprietorship of Asa T. Soule and his son Wilson. Sales of Doyle's Hop Bitters apparently flourished, and by the 1880s, Soule had become a very wealthy man.[21] The last available listing found for the company was in the 1881 Rochester directory, but it doubtless continued well past this time as subsequent directories were unavailable, and the bitters remained on the market (retailing at about 85¢-$1.00 per bottle) until the end of the century.[22]

Doyle's Hop Bitters were reportedly one of the most popular brands of the nineteenth century, and at least eighteen varieties of bottles for it are known to have existed.[23] The Old Sacramento collection contains only the three specimens described here, however, and these bitters are rarely listed in western trade catalogs.[24]

Drake's Plantation Bitters

At least six specimens of these bottles were recovered in Old Sacramento, unfortunately only one of them fairly complete. The distinctive containers are square, of amber glass, and made in a log-cabin design. Two faces are made entirely in a log-wall style, while this motif on the other two sides is interrupted by a large flat surface for the attachment of paper labels. The shoulders are made in a roof design, and on two faces of the roof is embossed "S T/DRAKES/1860/PLANTATION/X/BITTERS//PATENTED/1862" (Fig. 17b). The bottles seem to have been manufactured in a two-piece mold, and the finish is a sloping collar. The original capacity was 28 oz.

During his early years, Patrick H. Drake was a canal fee collector in Binghampton, New York. By 1858, Drake and a partner, Jerome B. Brown, had begun to manufacture and sell Catawba Bitters. The partnership of Brown & Drake was apparently short-lived, however; by 1859, Drake was in business by himself as the sole manufacturer of the Catawba Bitters.[25]

Drake moved his operations to New York City about 1860, and, by 1861, the firm of P. H. Drake & Co. was engaged in the manufacture and sale of Drake's Plantation Bitters, as well as the earlier nostrum.[26] In 1861, Drake formed a partnership with Demas Barnes, "the most powerful proprietary medicine king in the United States." This partnership was beneficial to both men, as Barnes' money allowed Drake to expand his operations and meet the increasing demand for his nostrum, while Barnes was in need of a laboratory with large facilities to produce the numerous proprietary medicines he had acquired. Drake's laboratory manufactured for Barnes such well-known products as Hagan's Magnolia Water, Hagan's Magnolia Balm, Lyon's Kathairon, and Mexican Mustang Liniment, as well as his own brands.[27] This facility must have been outstanding for its time, as

> there was a crushing room for barks, etc., plus a tank room, press room, filtering room, printing room, bottle preparation room (cleaning), filling and corking room and one for labeling. He had an advertising department, warehousing department, alcohol storage facilities and an engine room. It should be noted that he kept on hand a very large supply of St. Croix rum, which was the main portion of the[Plantation]Bitters.[28]

Drake & Co. dropped the Catawba Bitters line about 1864 and concentrated on the promotion of Plantation Bitters. They advertised this brand not only as a stimulant to the appetite, an antacid and a breath purifier, but also as a cure for dyspepsia, constipation, diarrhea, cholera, cholera morbus, liver complaints, and nervous headache, and a preventative for miasmic and intermittent fevers.[29] Since the "miasmic and intermittent fevers" of the last century were often the result of malaria, and a major component of the bitters was calisaya (cinchona) bark, at least the last of these claims may have had some basis in fact.

Important in Drake's promotional efforts was the "S.T. 1860 X" trademark. This featured prominently in all his advertising and indeed, seems to have been quite successful as an eye-catching device:

> I cannot fail to recount one instance of remarkable and ludicrous scenic effect. Everywhere I have been from the White Mountains of New Hampshire, through the Middle States, across the plains -- way up in the Rocky Mountains -- and now out upon Laramie Peak -- wherever there is a frowning rock or projecting surface -- that indomitable Drake has painted his cabalistic "S.T. 1860 X -- Plantation Bitters." He must be insane if he expects to get his expenses back out here -- although wherever I saw anything for sale, his Bitters formed a part of the stock. I paid $2.50 for a bottle on my way from Denver to Central City.[30]

After less than a decade of this kind of promotion, the bitters were grossing nearly a million dollars annually at wholesale, and the company was claiming to be the largest importer of St. Croix rum and Brazilian calisaya bark in America.[31]

In later years, and doubtless under the influence of the growing prohibition movement, the list of ingredients shifted somewhat. In one brochure, for example, the vegetable contents of the bitters -- by then an "old reliable homestead tonic" -- were more fully enumerated: calisaya, sweet flag, orange peel, dandelion, cascarilla, tansy, cardamom, caraway, anise, "and many other tonic, strengthening, blood-cleansing, and purifying elements." The once-specified medium from St. Croix, however, had become strangely anonymous:

> The basis of Plantation Bitters is the most nutritious stimulant and restorative known. Invalids go to the West Indies by thousands to spend a few months among the sugar factories and inhale the life-giving fumes of the presses. This stimulant, combined with the vegetable curative properties already mentioned, makes Plantation Bitters.[32]

Drake continued to manufacture patent medicines until his death in 1883. Thereafter, P.H. Drake & Co. was run by William P. Ward, who had become Drake's partner in 1870, when Barnes divided up his business enterprises. The business apparently did quite well until the early 1890s, when the firm disappeared from the directories.

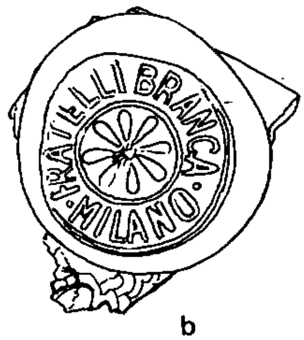
Thereafter, the bitters were manufactured by the Lyon Manufacturing Co. Plantation Bitters were still listed in trade catalogs at the beginning of the twentieth century, but by then the demand for them had declined to insignificance.[33]

Fernet-Branca Bitters

Sacramento's late nineteenth and early twentieth-century deposits have yielded at least eighteen light olive green shoulder seals (none, unfortunately, from an intact bottle) embossed "FRATELLI BRANCA/MILANO" (Fig. 18). They derive from bottles of Fernet-Branca Bitters.

The firm was founded in Milan in 1845 by three brothers, Giuseppe, Luigi, and Stefano Branca, who began producing their 78-proof herbal formula on a limited scale. Distribution of Fernet-Branca was at first restricted to the Lombard region of northern Italy, but in the ensuing decades the product was shipped to an ever-widening market. This expansion was aided by the prestige of a gold medal at the national exposition at Florence in 1861 and additional awards against international competition in London (1862), Paris (1867), Vienna (1873), Philadelphia (1876), and Melbourne (1880).[34] It was first shipped to the United States shortly after the unification of Italy in 1866.[35] Fernet-Branca Bitters seem to have been promoted primarily as a stomachic, and not as a cure-all nor as a disguised source of alcohol.[36]

a



b

Figure 18. Bitters bottles: a) Fernet-Branca (Osborn 1906:); b) Fernet-Branca shoulder seal.

Luigi Branca died in 1886, and Giuseppe followed two years later. Stefano, who had been prominent in municipal politics in the late 1870s and early 1880s as a liberal monarchist and a representative of local manufacturing interests, ran the firm alone until his death in 1891. Thereafter, the organization came under the management of various family members and outsiders, until Stefano's son Bernardino (1886-1937) succeeded to the directorship in 1917. The following year he incorporated the firm. Under his management the company had its greatest success, thanks to the radical modernization of the Milan facility, the refinement of laboratory techniques, an enlarged range of liquor products, and the expansion of foreign sales.

A branch operation in New York was inaugurated in 1921,[37] and by 1936, branches were also operating in Buenos Aires, St. Louis, and Chicago, as well as in Egypt and throughout central and western Europe.[38] It is to an earlier generation that we owe the Old Sacramento bottles, however; we can probably ascribe the local popularity of Fernet-Branca at the turn of the century to the heavy influx of Italian and Jugo-Slav immigrants in the decades preceding the first World War.[39]

Dr. Henley's Wild Grape Root IXL Bitters

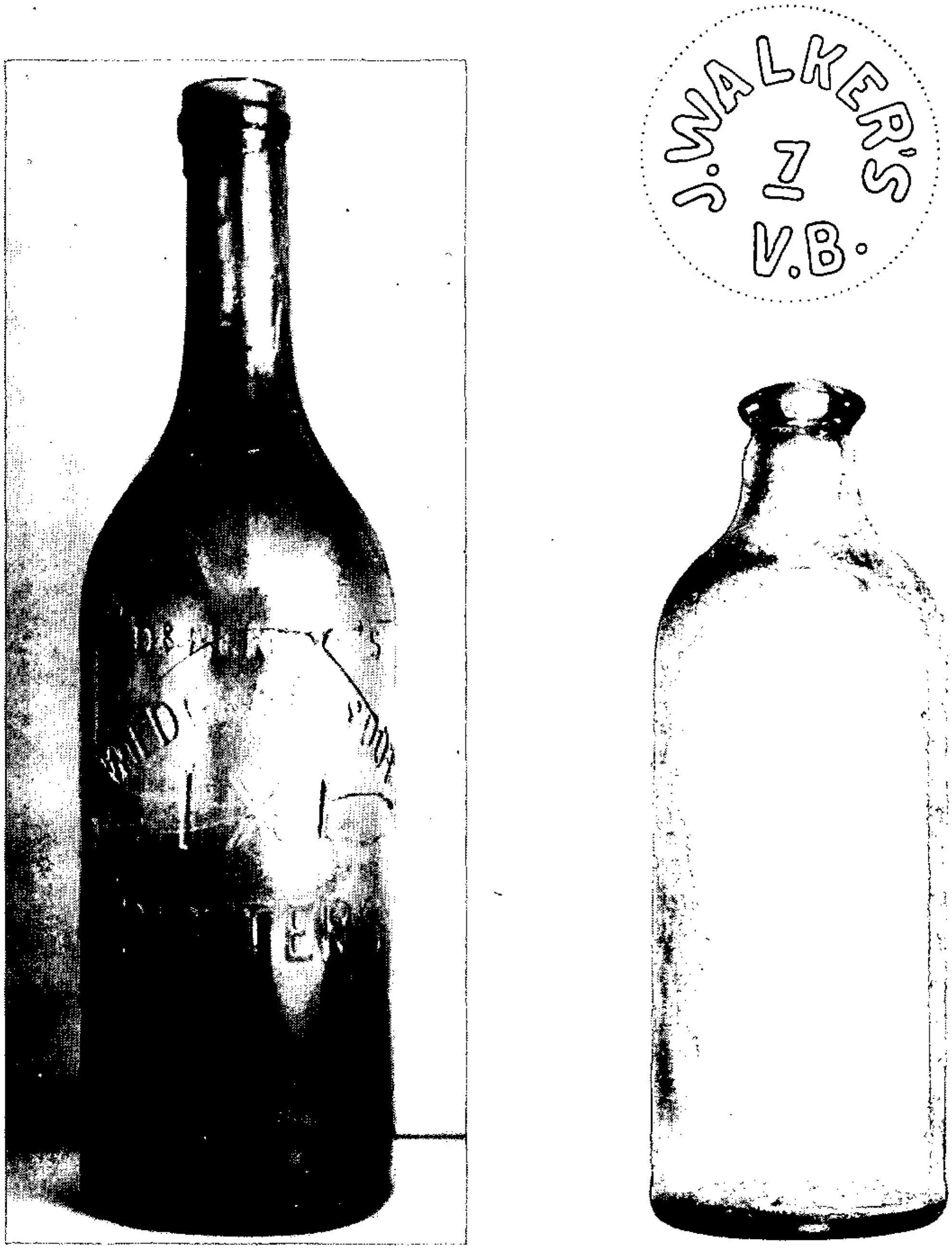
Only three examples of Dr. Henley's IXL Bitters have been identified in the Old Sacramento collections; they are round quart bottles of olive green glass made from a turn mold with a Bordeaux wine (laid-on-ring) finish. Horizontal embossing on one side of the bottle reads "D^{R}. HENLEY'S/WILD GRAPE ROOT/IXL/BITTERS" (Fig. 19a).

Dr. William A. Henley was practicing medicine in Portland in the early 1860s. In hopes of marketing one of his prescriptions as a patent medicine, he sailed in 1866 for San Francisco, where he formed a partnership with Louis Gross, Henry Epstein, and Hermann Robitscheck.[40] Robitscheck appears to have been the financial backer of the firm, and Epstein, the proprietor of a vineyard, supplied the wine for the doctor's concoction.[41] The firm was styled Louis Gross & Co., and it was soon producing Dr. Henley's Wild Grape Root IXL Bitters.[42]

Sales of Dr. Henley's Bitters appear to have been quite good in these early years. In 1869, L. Gross & Co. found it necessary to warn the public of Sacramento that certain "pirates" were attempting to sell inferior imitations. One could be protected by never buying in bulk and by always looking for the trademark on the bottle.[43]

In 1871, Henley was in Chicago with Epstein, attempting to establish a nationwide market for their product, but he was back in San Francisco the following year, the plan for expansion apparently having failed. The firm at this time and for several years afterward was styled H. Epstein & Co.[44] Henley organized a new firm, William J. Henley & Co., in 1873, in partnership with William J. Bradbury, but it survived only one year. Henley then returned to Portland.[45]

In the 1880s, the Portland firm of Hodge, Davis & Co. distributed, among other patent medicines, Dr. Henley's Oregon Kidney Tea. Since they acquired proprietorship of several Henley brands at this time, they may have owned the popular IXL Bitters. Charles Hodge was a druggist who came to Portland from San Francisco around 1860 and worked in the firm of Hodge & Calef. By 1868, George W. Snell, who later represented Hodge, Davis & Co., was a druggist with the firm. During that same period, Thomas A. Davis was a partner in Smith & Davis, reportedly established in 1850 and, according to its own claims, the oldest drug firm in Oregon.[46]



a b

Figure 19. Bitters bottles: a) Henley's IXL Bitters; b) Walker's Vinegar Bitters and basal embossing.

By 1878, following the departure of their original partners, Hodge and Davis had formed their wholesale drug firm, located on the southwest corner of Front Avenue and Oak Street, later 92 and 94 Front Avenue. George W. Snell was listed as representing the company in San Francisco; and the San Francisco City directories for 1882 and 1883 confirm that Hodge, Davis & Co. were maintaining an office in San Francisco in those years.[47] Sometime prior to 1888, Snell returned from San Francisco to participate in the drug firm of Snell, Heitshu & Woodard, which replaced Hodge, Davis & Co. at 92 and 94 Front Avenue.[48]

Meanwhile, Henley was probably not the proprietor of the IXL brand again until 1887. In that year, he returned to San Francisco, setting up an office on Montgomery Street and a residence in Alameda. As early as 1884, his son Alexander had been in San Francisco, working as a chemist for Tuthill, Cox & Co. The following year, Alexander was a chemist with the Celery, Beef & Iron Extract Co. (manufacturers of another Henley nostrum), but with the return of his father to San Francisco in 1887, he joined the family business.[49]

When the elder Henley died in 1888, Alexander and his brother, Walter F., founded Henley Brothers. This firm continued in business at 23 Montgomery Street until 1892, acting as proprietors and manufacturers of IXL Bitters.[50]

It appears that the product continued to be made into the twentieth century. A liquor trade journal of 1890 noted that IXL Bitters were then "having a fine run among all those who do not take their whiskey straight" -- the bitters being reputed "particularly palatable when dashed into mixed drinks."[51] They were selling at this time for about $1.00 per bottle. In 1905, the bitters were reported to contain 52% alcohol, and as late as 1912, the American Medical Association was warning the public of IXL Bitters as one of a large number of "booze medicines" on the market. In the same year, the sale of the product by druggists was declared illegal by the Commissioner of Internal Revenue, unless the druggist paid the tax required of a retail liquor dealer.[52]

Dr. Hostetter's Stomach Bitters

Thirty Hostetter's Bitters bottles have been recovered during the Old Sacramento excavations, indicating that the brand was by far the most popular of those represented. The bottles are square and of dark amber or olive green glass, made in two-piece molds. Most held 20 oz, but a few (all fragmentary) are larger. All are embossed on one face "DR. HOSTETTER'S/STOMACH BITTERS" and have a sloping-collar finish (Fig. 20a). As with the color, minor variations occur in the style of the embossing.[53] The bases may be either unembossed or bear the designation of a glassworks. The Old Sacramento specimens include the designations "WMcC & Co" (Wm. McCully & Co.), "S. McKEE & Co." "I. G. Co. L.," (Imsen Glass Co.), and "A & D H C" (A. & D. H. Chambers), all located in Pittsburgh.

Sold for over a century, this popular product was introduced to commerce by David Hostetter about 1853, in Pittsburgh, as Dr. Hostetter's Celebrated Stomach Bitters, and was purportedly based on a prescription dispensed by Hostetter's father, Dr. Joseph Hostetter. An extensive advertising campaign resulted in the nostrum's singular success.

David Hostetter was born in Lancaster County, Pennsylvania, in 1819, and spent much of his youth in the dry goods business there. About 1842 he went into business for himself. The enterprise seems not to have been particularly prosperous, however, for in 1850 he left the store in the charge of his partner and sailed for California. Hostetter found even less prosperity in the West: after only a few weeks in the gold fields he became discouraged with prospecting and returned to San Francisco. There he started a grocery business, but within a month he lost his entire stock to the great conflagration of 1851.

Returning to Pennsylvania, he found his original business deeply in debt and his partner absconded. He worked briefly as a railroad paymaster, but about 1853, he joined with George W. Smith, who put up the capital to start a bitters business on a modest level, in Pittsburgh. City directories of 1856 and 1857 list the form of Hostetter and Smith, proprietors of Hostetter's Bitters, at 267 Penn Avenue. By 1858 the firm had moved to larger quarters at 58 Water Street and 58 Front Street.[54]

During the early years of the business, Hostetter traveled extensively selling the bitters. The partners spent the bulk of their profits on advertising in newspapers, periodicals, almanacs, and handsheets, so that by the 1860s their trademark was known nationwide. Unembossed bottles were succeeded in 1858 by the first embossed containers, probably produced by the Samuel McKee Glass Works. The transition to embossing seems to have been gradual, however, since the firm's advertisements continue to depict apparently unembossed bottles at least until the end of 1859 (Fig. 20b), and the shipment of Hostetter's bottles excavated from the hold of the Steamboat <u>Bertrand</u>, which sank in 1865, contained several unembossed specimens.[55]

a b

Figure 20. Hostetter's Bitters: a) Bottle from Old Sacramento; b) Hostetter's bottle in an early advertisement (*Hutchings' California Magazine* Sept., 1859, Bancroft Library).

In the early 1860s, the first Hostetter's Almanac was printed, with its cover design representing a naked St. George, as Medicine, slaying the dragon, Disease. The bitters were claimed to be "a sure cure for DYSPEPSIA: [and would] remove all flatulency or heaviness from the stomach, keep you free from COSTIVENESS, ASSIST DIGESTION, GIVE A GOOD APPETITE, Impart a healthy tone to the whole system, and be a certain preventative of FEVER AND AGUE."[56]

By all accounts it was the Civil War that made these bitters a real success. Hostetter's ads argued that instead of using ordinary "adulterated" alcohol for hospital purposes, the government, for the "health of the army" and "in the name of common humanity," should purchase Hostetter's Stomach Bitters to "save unacclimated individuals from epidemic fever, dysentery, diarrhea, liver attacks, fever and ague, and all other complaints specially incident to unhealthy regions," which in the popular mind included large portions of the South.[57] According to some sources, the federal government "brought Hostetters by the carload for the troops." In any case the product achieved immense popularity in military camps, where liquor in the straight form was prohibited. By 1866, the firm was claiming sales of 600,000 bottles annually.[58] Apparently, much of the bitters' "therapeutic" effect was due to their high alcohol content. According to an 1883 analysis by a Department of Agriculture chemist, the bitters contained a 4% mixture of various oils, such as anise and coriander, and some vegetable bitters, such as gentian, cinchona, and possibly orange peel, calamus, colombo, and others. The chemist reported that the bitters were 64% water and 32% alcohol. Later studies recorded alcoholic contents as high as 44.3%.[59]

The alcohol content was an issue with temperance forces throughout those years. Also, as early as 1878, it was a matter of concern for the Department of Internal Revenue, since proprietary medicines and alcoholic beverages were taxed at different rates. However, the Commissioner of Internal Revenue, in 1883, decided that only if the bitters were sold as a "drink" would the dispenser be required to pay a liquor tax. They generally retailed, during the late nineteenth century, for 75¢ to $1.00 per bottle.[60]

During this period David Hostetter's interests were expanding. Having formed a partnership with Benjamin Dean of San Francisco in 1863 to develop the western market, Hostetter bought him out in 1869 and formed a partnership with John H. Redington, who owned the largest West Coast wholesale drug company. This affiliation lasted until 1876, after which Redington remained the agent for the bitters on the West Coast. In other fields, Hostetter founded banks, was involved with the Pittsburgh Gas Company, invested in mining in the West, and built an oil pipeline and a railroad.[61]

When David Hostetter died in November, 1888, he left an estate worth approximately $18,000,000. His son, D. Herbert Hostetter, took control of the company until his death in 1924. The latter years of D. Herbert Hostetter's management were a critical period for the company. In 1905 a new Commissioner of Internal Revenue reversed the 1883 decision and ruled that nostrums high in alcohol were liquors. Manufacturers and retailers of such products were required to purchase federal licenses. The Pure Food and Drug Act of 1906 necessitated the reduction of the product's alcohol content to 25%. In 1920 the American Medical Association brought attention to the bitters' alcohol content and the medicinal claims for them, though the company's only apparent response was to change the word Stomach to Stomachic on the label. Because of absentee management and a lack of advertising, the company did not profit from Prohibition by the bitters' remaining alcohol content.[62]

D.Herbert Hostetter's son, Federick, served as president of the company from 1924 to 1930, when, following Federick's death, his son, D.Herbert Hostetter, Jr., controlled the declining firm until he sold it in 1934. The company went through various reorganizations in the following decades. In 1935, a new concern was incorporated, intent on revitalizing the bitters and headed by Saunders Norvell. The Hostetter Corporation was listed as a medicine manufacturer in the Pittsburgh directories in the 1930s and the 1940s, William B. Wylie being its president for a time. Another reorganization in 1954 under Charles G. Brown failed to make a success of its product, called Hostetter Tonic, and the company was essentially out of business by 1958.[63]

Lacour's Sarsapariphere Bitters

Only a single fragment of the base of a round bottle of amber glass is available for these bitters, but the ring-and-panel design of Sarsapariphere containers is sufficiently distinctive that there can be no question of the identification.[64]

Louis Lacour was in business with Jean E. Castera on Washington Street in San Francisco in 1859. Castera had been importing French wines and liquors for some years previously.[65]

By 1866, Lacour had taken over the firm and had begun production of his new sarsaparilla bitters. Sales were good and distribution wide. On January 25, 1867, Lacour filed an application with the office of the Secretary of State for exclusive use of the trademark, "Sarsapariphere Bitters."[66] Lacour's health failed, however, and in 1869 he retired to San Rafael. He had achieved enough respect among the members of the California Stock Exchange that upon his death in 1873, they voted unanimously to cease operations for the day.[67]

The proprietorship of Lacour's Sarsapariphere after his death cannot yet be clearly established. Wilson and Wilson suggest that it passed to the firm of Weil Bros., and it is perhaps significant that this company appears to have been organized in 1869, the year Lacour retired.[68]

The Weil brothers were William, Leopold A., David, and Joseph. Their firm and its successors were to keep the name of Weil on the business scene in San Francisco for the next 50 years. In 1869, the firm was located on Jackson Street and dealt in foreign and domestic wines and liquors. David and Joseph opened a business in Shasta, California, in 1872, but also remained members of the San Francisco firm until 1878. The San Francisco firm was reorganized as Weil Brothers and Sons by 1887, when Alexander W. (probably the son of William) and Alexander L. (probably the son of Leopold) joined the firm. Leopold and Alexander L. left the firm in the late 1890s. Leopold established his own wholesale wine and liquor business under the name Weil and Co. and, by 1897, Alexander L. was assistant manager of the "Gent's Furnishings" department at the Emporium.[69]

By 1898, the original brothers and sons had been reduced to William and Alexander W. The San Francisco business directories of the early twentieth century listed them as wholesale liquor dealers and as agents for Dr. Russell's Pepsin Bitters. William died in 1904, leaving Alexander W. to manage the business until it ceased operations in 1917.[70] The bitters, however, had apparently disappeared from the market long before, and it is doubtful that they were a lasting success, since we have not seen them listed in trade catalogs from the late 1870s on.

Peruvian Bitters

A few fragments of a single broken bottle are the only evidence in the Old Sacramento collection of this once-popular product. These few pieces of yellow amber glass are from a square sixth, with an inset panel on one face and a squared-lip finish. It was made in a two-piece mold. The bottle is embossed "PERUVIAN/BITTERS//W&K" -- the initials being superimposed and surrounded by a shield (Fig. 21). This design was the monogram of the firm of Wilmerding and Kellogg -- an enterprise which was founded in 1869. However, both partners in this firm, Jacob Clute Wilmerding and Calvin Whitewood Kellogg, had long years of experience in business in San Francisco before that year.[71]

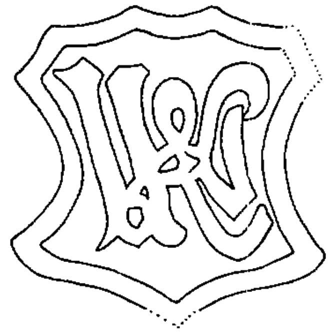


Figure 21. Embossed mongram of Wilmerding and Kellogg from Peruvian Bitters bottle.

Wilmerding and Kellogg were both New Yorkers who came to California during the gold rush. Kellogg was born in Syracuse in 1822. As a young man, he moved to Michigan, but soon abandoned his life as a miller there to join the gold rush. By 1852, he had given up the search for gold and opened a grocery store in San Francisco. The following year he joined the Fargo Wholesale Liquor Co. Meanwhile Wilmerding (born about 1833) had come to California at the beginning of the gold rush, worked in the mines for a few years, and then had gone also to work for the Fargo company. By 1860 both men had joined in partnership with Calvin F. Fargo under the name C. F. Fargo & Co.[72]

The firm had been reorganized by 1869 as Wilmerding and Kellogg, although business continued at the same location, 214-216 Front Street. In 1874 or 1875, Wilmerding and Kellogg took in a new partner, John T. Haviland, who for the previous ten years had been involved with the retail glassware and crockery business, and reorganized the firm under the name Wilmerding, Kellogg & Co.[73]

Meanwhile, in the early 1870s, while remaining in partnership with Wilmerding, Kellogg expanded his interests to include the financial world. By 1873, he had become president of the Commercial Insurance Co. of California and by the following year, president of the Merchant's Exchange Bank as well. Kellogg's new career in finance, however, was short-lived. By 1879 his speculations had proved disastrous, and though he narrowed his interests again to the Front Street liquor operation, a reorganization in 1879 or 1880 created Wilmerding & Co. with Wilmerding and Haviland as partners. Kellogg remained as the manager of the business, but was never again a partner.[74]

In July, 1880, Wilmerding & Co. filed an application with the Secretary of State for exclusive ownership of the trademark "Peruvian Bitters." A label which accompanied the application describes the principal ingredient as cinchona rubra. The drink, it was claimed, could serve as an appetizer and also as a strengthener of the stomach. It could remedy chills and fever, malaria, and dipsomania. Since cinchona bark is the source of quinine, antimalarial claims for the product have a plausible basis. Dipsomania, defined as an uncontrollable craving for alcoholic liquors, was no doubt remedied less by the cinchona and more by the remaining ingredients of the celebrated concoction.[75]

Wilmerding & Co. produced Peruvian Bitters into the 1890s.[76] Wilmerding, while maintaining his association with the company, had moved to New York by 1891. He died in 1894.[77] Haviland, after repeated disagreements with Kellogg, disposed of his interests in the enterprise about 1892; he died in 1895 or 1896.[78] Kellogg continued to manage the firm, showing at the same time another burst of that enterprise which had carried him beyond the liquor business in the 1870s. He became president in 1895 of the Midas Gold Saving Machine Co. This time, his expanding interests were cut short by his death, which occurred in 1895. His wife continued in the wholesale liquor business until the early twentieth century in a company bearing her husband's name.[79]

The successor to Wilmerding & Co. was Wilmerding-Loewe Co., Inc., which was incorporated in 1895 after Wilmerding's death and took over the company's facility. M. Seigel was president of the new company, Jacques Blum served as vice-president, and Bernard Rosenberg as secretary. Blum became president in 1905; J. M. Loewe became vice-president; and Rosenberg remained as secretary. This firm finally ceased operations in 1918 or 1919.[80]

In the San Francisco business directory of 1900, Peruvian Bitters were said to be available at 1117 Mission Street. This was the address of Lash's Bitters Co., managed by Joseph J. Spieker. Peruvian Bitters continued to be handled by this company through 1905, but by 1910 the firm had disappeared from the listings.[81]

Dr. Renz's Herb Bitters

Five square olive brown or amber sixths represent this product. All are fragmentary, but they seem to have been made in two-piece molds, and to have been embossed on one face "DR RENZ'S/HERB BITTERS." None of the bottles retains the finish.[82]

John Renz was born in Württemberg about 1833. After emigrating first to Pennsylvania, he came to California and in 1856 or 1857 established himself in Sacramento as a painter of signs and carriages. By 1866, he had given up the painting business and instead was retailing "paints, oils [and] glass" from his store at 222 J Street. He left Sacramento in the following year and began to manufacture bitters in San Francisco, where he was to spend the rest of his life. Advertisements for Dr. Renz's Herb Bitters claimed that they had been handed down from a German recipe given to John Renz by his father. When Renz began to manufacture and sell these bitters about 1867, the sole agency was given to the San Francisco drug wholesaler and manufacturer, Charles Langley. In 1869, Dr. Renz's Herb Bitters won a silver medal at the California State Fair.[83]

In 1872, Renz first appeared in the San Francisco directories as the manufacturer of Renz's Herb Bitters. In 1875, he also began to deal in wines and liquors from his new location at 219 Commercial Street. As a liquor wholesaler, he dealt in Renz's Blackberry Brandy and Bonanza Bourbon. From 1875 until 1896, Renz continued to be found among the directory listings as a wholesale liquor agent and the manufacturer of Renz's Herb Bitters. He died in 1897, and was survived by his widow, Wilhelmina, and four children.[84]

According to Wilson and Wilson, Renz's bitters were sold in unembossed bottles after 1882. We have no indication that manufacture of the bitters continued after Renz's death.[85]

Dr. Siegert's Angostura Bitters

Several pint bottles that held this product have been recovered from Old Sacramento, and they are of particular interest because changes in embossing reflect the company's history. The bottles are cylindrical and of dark green or black glass and made -- when this can be determined -- in a three-piece (Ricketts) mold with a double-collar finish. They are usually embossed on the shoulder as well as on the base, the variant labels being: "D$^{\underline{R}}$ SIEGERT/C$^{\underline{O}}$ BOLIVAR" and "D$^{\underline{R}}$ J G B SIEGERT & HIJOS" (Fig. 22a).

Johann Gotlieb Benjamin Siegert was born in 1796 in Grosswalditz, Silesia. He studied medicine at the University of Berlin, and became a surgeon in the Prussian army during the Napoleonic wars. After leaving the army, he became interested in the wars for independence in South America, and in 1820 left for Venezuela, where he joined the army of Simon Bolivar. He again enlisted as a surgeon and was placed in charge of the military hospital in Angostura.[86]

In addition to his practice, Siegert was an avid student of medical botany. In 1824 he developed a bitters which he prescribed for digestive and similar stomach disorders. He began bottling the formula as demand increased, and in 1830 began exporting it, at first to Trinidad and England. The exported product became known as Angostura Bitters, after the town where it was produced. This designation was eventually adopted as a trade name, and was retained even after the municipality changed its name in 1846 to Ciudad Bolivar.

It is noteworthy that the name of the product led to the popular belief (denied by the company) that it contained angostura bark, and this is consistently reflected in recipes for imitation provided in liquor dealers' guides of the period.[87] The present product, which according to the company is still made by the original formula, contains 45% alcohol by volume, as well as water, gentian, and a combination of other vegetable ingredients.

In 1867 Siegert, who had given up his medical practice to devote full time to the bitters operation, took his oldest son Carlos into copartnership, and the name of the firm was changed to Dr. J. G. B. Siegert & Hijo. Dr. Siegert died in 1870. Two years later Carlos' younger brother Alfredo became a partner, and the firm was thereafter styled Dr. J. G. B. Siegert & Hijos. The family seems to have become involved in political difficulties about this time, however, for in 1875 the Siegert brothers fled Venezuela and reestablished their business in Trinidad. After additions to the partnership of various other family members, the firm was converted to a public company in 1909 and the name changed to Angostura Bitters (Dr. J. G. B. Siegert & Sons) Ltd.

In spite of the family's political difficulties, the business seems to have continued to prosper throughout this period. Based primarily on lack of contradictory evidence, we believe that advertising -- at least in America -- was of little importance in the early success of the firm. They certainly never approached Hostetter's efforts in this regard; and even such lesser brands as Renz's and Walker's, to judge from the frequency with which their ads graced American newspapers, must have had larger promotional budgets than Angostura. The Siegert's early ads included the claim that the bitters "cured Dyspepsia, Diarrhrea, Fever and ague, and all disorders of the Digestive Organs." When ads for the product began to appear prominently in American magazines around the turn of the century, however, only its value as an "appetizing tonic and stomach corrective" was stressed, totally avoiding the extravagant medical claims which about this time began to bring many other bitters into disrepute.[88] By the 1890s, in any case, Angostura Bitters had attained nearly ubiquitous listing in drug and grocery trade catalogs (although unfortunately it is often impossible to distinguish Siegert's from Abbott's Bitters in these listings), retailing for about 85¢ to $1.50 per bottle.[89]

Figure 22. a) Siegert's Angostura Bitters basal embossing; b) Underberg Bitters bottle and basal embossing.

Despite the turn-of-the-century advertising campaign, however, World War I brought a major setback. Perhaps because of difficulties in shipping or wartime prohibition, or because of the prominence of German and Austrian medals and appointments in Angostura advertising,[90] sales began to drop. The company's profits fell substantially, and the value of its shares dropped to ten shillings each. These developments, combined with the financial losses of the director and major shareholder, Alfredo C. Siegert, in other ventures, forced him to divest himself of almost all his holdings. Although the Siegert family continued to manage the company, it did not regain financial control until 1958, when the government of Trinidad bought controlling interest in the enterprise and resold it to a Siegert-dominated holding company in order to prevent the firm's being moved to Bermuda.

Underberg Bitters

Three round 12 oz bottles of dark amber brown (almost "black") glass constitute our representatives of these bitters. These bottles are made in a three-piece mold and have bases embossed with the superimposed U-A monogram of the company (Fig. 22b). The finish is an applied string below a fire-polished lip.

Hubert Underberg-Albrecht began commercial production of his Boonekamp Bitters in Rheinberg, Germany in 1846.[91] We have very little information on the history of this enterprise. Underberg Bitters, which are still being produced, are a 98-proof preparation of "water, alcohol, roots and herbs of the genus Gentiana." They seem not to have been much advertised in the United States until the early twentieth century, though they are commonly included in nineteenth-century trade catalogs, selling for 70¢ to $1.00 per bottle.[92] The containers were apparently made by the company itself, since Underberg exhibited bottles in the Glass Manufactures Section at the Centennial Exhibition in Philadelphia in 1876.[93]

J. Walker's Vinegar Bitters

Joseph Walker was living in the foothills of California in the early 1850s when he happened to observe an Indian gathering herbs for medicine near Knight's Ferry. Numerous American proprietary remedies of the time claimed an aboriginal source, and Walker must have been struck by the prospects of promoting the real thing. He soon had Indians collecting herbs for him on a large scale. In 1866, he moved his operation to Stockton, where he went into business at the corner of American and Channel streets, selling his "California Vegetable Renovating Vinegar Bitters." He trademarked the brand at the beginning of the following year.[94]

About the same time, Walker offered Dr. Richard H. McDonald of Sacramento the agency for Vinegar Bitters. McDonald had arrived in Sacramento from Kentucky in 1851 and opened a drugstore at 143 J Street. In 1854, he advertised himself as a "Physician and Druggist," and was the proprietor of the Miner's Drug Store at 139 J Street. In 1863 or 1864, McDonald opened an office in San Francisco, at the corner of Sansome and Pine streets. The office was managed by J. C. Spencer, while McDonald retained his residence and store in Sacramento.[95]

About 1866, McDonald moved to San Francisco on a permanent basis.[96] Having accepted Walker's offer, he began to bottle and sell the nostrum soon thereafter. Purportedly a "strictly medicinal preparation, manufactured from the Native Roots and Herbs of California, gathered when the juices are richest in their healing properties,"[97] it was promoted as

> a safe and certain cure, and the only one ever discovered for
> Scrofula,
> In its various forms, such as consumption in its early stages, Enlargement and Ulceration of the Glands, Joints, Bones, Kidneys and Uterus, Chronic Rheumatism, Eruptions of the Skin, Chronic Sore Eyes, etc. Also,
> Diseases of Women,
> Loss of Appetite, Sick Headache, Liver Complaint, Pain in the Back, Imprudence in Life, Gravel, General Ill Health, and all diseases of the Blood, Liver, Kidneys and Bladder... Pin, Tape, and other Worms lurking in the systems of so many thousands on this Coast are effectually destroyed and removed. It is a gentle Purgative and Tonic.[98]

By the end of 1868 Walker and McDonald were claiming 100,000 satisfied customers. The product sold for about $1.00 per bottle.[99]

Since most of our information on the firms reported here derives from such bare sources as city directories, or from the claims of the businesses themselves, it is noteworthy that the activities of Walker and McDonald provoked an account of the origin and promotion of Vinegar Bitters from a contemporary observer who was decidely not in their camp:

> A number of years ago, an individual coming overland with a company to California, served as cook for the company, and was styled "doctor" on that account. He settled in Calaveras County and labored as a miner, without much success. His attention was then turned to the medicinal qualities of the herbs growing about him, and he came to San Francisco with the idea of making and vending a preparation to be called "Indian Vegetable Bitters," and to contain no alcohol. He fell in with an enterprising druggist of this city, who saw money in the project and embarked in it. At the suggestion of the latter, the "Indian" was struck out, and as the new medicine got sour by fermentation, it was concluded to call it "Vinegar Bitters," and to identify it with the movement against alcoholic drinks. The mountain herbs were thrust aside, and aloes, being a cheap bitter, was substituted. "Nine sick people out of ten," said the druggist, "will be cured by purging." Wherefore the aloes. So the cook became doctor, and the decoction became sour, and "Doctor Walker's Vinegar Bitters" began their career in the newspapers.
>
> At that juncture, I one day opened a new number of the "Pacific Medical and Surgical Journal," of which I was editor, and found to my amazement and mortification, a full page advertisement of this nostrum, with all its pretensions duly set forth. The advertisement had been sent to the printing office and inserted without my knowledge. It did not appear again.
>
> A year or more afterwards, a medical gentleman of St. Louis wrote to me inquiring if I had ever endorsed the nostrum, and stating that every bottle of it distributed in the valley of the Mississippi bore my recommendation. The good "Doctor" Walker, or an equally conscientious coadjutor, had copied from the discarded advertisement his own statement of the virtues of the "Bitters," and credited it to me as the editor of the Journal! If the traffic in nostrums is thus capable of developing fraud and forgery in men of moral and religious character, to what extremes of depravity must it reduce those who have no higher motive than worldly gain!
>
> The truth is, the "Vinegar Bitters" is one of the vilest, if not the very vilest, of all the concoctions in the market; and it is rendered more repulsive and obnoxious by concealing its poison with the mask of temperance. That it contains alcohol there is no doubt. Even if the dregs from the tincture bottles are not appropriated in its manufacture, the fermentation which it undergoes produces alcohol. Its harsh and drastic properties have given rise to serious injury in many instances within the knowledge of myself and others. I am cognizant of the instance of a man who contracted a habit of using it so as to consume a bottle in a day. The result was an attack of acute mania, for which he was sent to [the mental hospital at] Stockton. He recovered in a short time, and is now living in San Francisco to tell the story, but not to illustrate it by drinking "temperance bitters."[100]

About 1870 both Walker and McDonald left for New York. Walker appeared there that year, still as the proprietor of the Vinegar Bitters, at 34 Platt Street. His business address changed frequently in the succeeding years, and in 1876 he had gone into the grocery business as well. His final listing is in the following year -- it is doubtless at this time that he died, reportedly from being struck by a train.[101]

R.H. McDonald, meanwhile, had closed his Sacramento store in 1871 and, leaving the San Francisco operation (which continued to function until 1873) under the management of O.H. Bogart, moved to New York.[102] R.H. McDonald & Co.'s early New York listings were simply as an office of the San Francisco firm -- and they seemed primarily involved with the agency for Vinegar Bitters. By 1874, however, the company had become a New York-based distributor of patent medicines. The firm continued to appear among the New York directory listings for distributors of patent and proprietary medicines until 1890, although McDonald returned to San Francisco in 1879.[103]

Upon his return to San Francisco, McDonald immediately established himself in the banking business. By 1881, he was listed as president of the Pacific Bank on the northwest corner of Sansome and Pine streets; and his son, Richard, Jr., was the bank's vice-president. Although there is no evidence that McDonald was associated with the bank earlier, an 1885 advertisement claimed the bank was established in 1863. Interestingly enough, in 1864, R.H. McDonald was located on the southwest corner of Sansome and Pine streets, across the street from the bank's 1880 location. The bank failed in the early 1890s, and in 1895 R.H. McDonald, Jr. was prosecuted for perjury in regard to his statements of its financial status. There is no indication that R.H. McDonald & Co. existed subsequent to this time, either as a distributor of patent and proprietary medicines, or in any other form. Our last reference to the bitters is from 1900.[104]

Endnotes

1. Anonymous 1894.

2. Danridge 1906:323, 331, 463.

3. Gibbons 1874:16-18.

4. Sacramento Transcript Nov. 22, 1850:1.

5. Woods 1873:17, 1875:17, 1876:17, 1877:49, 1878:49, 1879:49.

6. Woods 1880:49, 1886:49, 1564; Polk & Co. 1893:50, 1905:102.

7. Pacific Wine and Spirit Review July 6, 1894:16.

8. Polk & Co. 1909:202, 1918:2602, 1923:250, 1942:38, 1956:38, 1527.

9. See Wilson and Wilson (1969:11) for a photograph.

10. Wilson and Wilson 1969:22.

11. Langley 1872:612, 1877:808; Wilson and Wilson 1969:10.

12. Wilson and Wilson 1969:10; San Francisco business directories 1872 to 1905.

13. California State Archives, Trademark Application No. 666, filed Feb. 25, 1881. Wilson and Wilson (1969:10) indicate that African Stomach Bitters were being produced as early as 1875, but we have no evidence of them prior to the trademark application.

14. Redington & Co. (1891:92) lists African Bitters at $8/doz wholesale. The product last appears in Spruance, Stanley advertising in May 1898 (cf. Wine, Spirit and Tobacco Review May 31, 1898:4; June 30, 1898:4).

15. Williams 1855:18, 1857:13, 1858:13, 1860:37, 1862:39; 1866:51, 1868:49.

16. Williams 1869:51, 170, 1870:52, 1874:82.

17. Williams 1881:86.

18. Williams & Co. 1889:18, 699.

19. Wilson and Wilson 1971:112; Drew, Allis & Co. 1873:98, 494.

20. Hop Bitters Manufacturing Co. 1877:24.

21. Drew, Allis & Co. 1874:287, 340; Wilson and Wilson 1971:112. Soule's advertising flair and enthusiasm for sports were combined in his sponsorship of a local baseball team, the Hop Bitters, whose successes made the product's name, at least in upstate New York, a household word (McKelvey 1973:105, 120).

22. Drew, Allis & Co. 1881; Weeks & Potter 1890:147; Langley & Michaels Co. 1897:111; Goldthwaite 1898:6.

23. Wilson and Wilson 1971:112.

24. Cf. Redington & Co. 1891:92; Langley & Michaels Co. 1897:111.

25. Wilson 1856:26; Adams and Lawyer 1858:13, 21; Boyd 1859:42.

26. Trow 1862:244; Wilson and Wilson 1971:112.

27. Wilson and Wilson 1971:112, 147.

28. Wilson and Wilson 1971:112.

29. San Francisco Evening Bulletin Feb. 3, 1863:4; Sacramento Bee Sept. 4, 1866:1.

30. Barnes 1866:43. This quotation is an excellent encapsulization of the Plantation Bitters advertising campaign, but the writer's apparent surprise at it is obviously feigned -- he was Drake's partner; 85¢ to $1.00 per bottle seems to have been the usual price in more civilized locales (cf. Lebenbaum & Co. 1879:8; Weeks & Potter 1890:147; Goldthwaite 1898:6; Pharmaceutical Era 1900:216).

31. Rowell 1906:389; Sacramento Union Jan. 1, 1869:4.

32. Lyon Manufacturing Co. n.d.:11.

33. Wilson and Wilson 1971:112; Trow City Directory Co. 1883:444, 1891:498; Lyon Manufacturing Co. n.d.:11; Pharmaceutical Era 1900:216; Rowell 1906:390.

34. Most of the historical account follows Castronovo (1971).

35. Frank Musitano, Fratelli Branca, New York, personal communication. The earliest reference we have found to Fernet-Branca in the West is in an 1891 trade catalog (Goldberg, Bowen & Co's Monthly Prices Current July 1, 1891:16) which lists pints at 90¢ and quarts at $2.00.

36. Cf. Pacific Wine and Spirit Review Dec. 30, 1890:21.

37. Frank Musitano, personal communication.

38. Castronovo 1971:754.

39. Fernet-Branca bottles with shoulder seals were depicted in the company's advertising at least as late as 1919 (Pacific Wine, Brewing and Spirit Review June 28, 1919:19); Frank Musitano (personal communication) reports that the seals were discontinued when the American agency was established in 1921 (cf. Bronx County Pharmaceutical Association 1925:60 for an illustration of the new seal-less bottle).

40. Wilson and Wilson 1969:30; California State Archives, Trademark Application No. 104, filed May 26, 1868; California State Archives, Trademark Application No. 157, filed Jan. 1, 1870. Two separate trademark applications exist, one for Dr. Henley's Wild Grape Root IXL Bitters, and one for Dr. Henley's IXL Bitters. Based on the preponderance of evidence from other sources, it is assumed below that this was one product with different names.

41. Langley 1868:252.

42. Wilson and Wilson 1969:30; Langley 1871:319.

43. *Sacramento Union* Jan. 1, 1869:6.

44. Langley 1873:115, 298; Wilson and Wilson 1969:30; *San Francisco Post* Aug. 20, 1872:4, Oct. 3, 1873:2; *San Francisco Journal of Commerce* Sept. 23, 1874: supplement, p. 6.

45. Francis, Valentine & Co. 1887:597; Wilson and Wilson 1969:30-31. Epstein went on to become in 1880 a partner of the prominent wine-producing firm of Arpad Harazthy & Co. and president of the San Francisco Wine Dealers' Association (*Pacific Wine and Spirit Review* Jan. 21, 1892:21, July 6, 1894:13).

46. Wilson and Wilson 1971:119; McCormick 1866:vii, 1869:45, 81.

47. McCormick 1878:115, 163; Francis, Valentine & Co. 1882:503, 1883:557.

48. Polk & Co. 1888:215, 199, 491.

49. Francis, Valentine & Co. 1884:561, 1885:586, 1886:60, 1887:597.

50. Francis, Valentine & Co. 1888:591; Wilbur 1892:701; Wilson and Wilson 1969:32, 1971:119.

51. *Pacific Wine and Spirit Review* Sept. 30, 1890:9.

52. Pharmaceutical Era 1900:227; *Pacific Wine and Spirit Review* Nov. 30, 1905:40; American Medical Association 1912:587.

53. Wilson and Wilson (1969:36-41) describe nearly forty variant bottles for this product, in sundry shades of amber, olive green, and black glass.

54. Wilson 1898:1005-1006; Thurston 1856:65, 1857:95, 1858:106.

55. Wilson and Wilson 1969:34; O'Connell 1972:7; *Hutchings' California Magazine* Sept., 1859:n.p.; Switzer 1974:34. Those trying to date Hostetter's bottles should note that while the embossed bottle was retained well into the present century with virtually no major alteration in style, by 1915 the containers were being made in automatic bottle machines (with a year code on the base which makes precise dating possible) and with the volume embossed on one side near the base (Adams, Gaw, and Leonhardy 1975:129-130). For nineteenth-century specimens, the best chronological key is the glassworks mark on the base, if one is present.

56. Thurston 1856:68.

57. *Harper's Weekly* April 25, 1863:270.

58. O'Connell 1972:7; *Harper's Weekly* Aug. 4, 1866:495.

59. Evans 1883:282; *Pacific Wine and Spirit Review* March 31, 1904:40, May 31, 1904:58, Nov. 30, 1905:40.

60. Evans 1883:282; Family Visitor and Prices Current (Andrew Sbarboro, San Francisco) Aug., 1868:4; Lebenbaum & Co. 1879:8; Pierce & Co. 1886:28; Goldberg, Bowen & Co's Monthly Prices Current July 1, 1891:16; Goldthwaite 1898:6; Pharmaceutical Era 1900:226.

61. Wilson and Wilson 1969:34; Wilson 1898:1006-1008.

62. Rowell 1906:390; Young 1961:135; Anonymous 1905.

63. Holbrook 1959:166; Polk & Co. 1938:596; Holbrook 1959:166.

64. For a photograph of the bottle, see Wilson and Wilson 1969:43.

65. Wilson and Wilson 1969:42; Langley 1860:90; Harris, Bogardus & Labatt 1856:33; Bagget 1856:146; Langley 1858:86, 1859:84.

66. California State Archives, Trademark Application No. 69, filed Jan. 1, 1867.

67. Wilson and Wilson 1969:42.

68. Wilson and Wilson 1969:42; Langley 1869:629.

69. Langley 1872:669, 1878:866; Francis, Valentine & Co. 1887:1204; Crocker Co. 1897:1755, 1898:1711-12.

70. Crocker Co. 1898:1711-12, 1917:2097, 1918:1743.

71. For an illustration of an entire bottle, see Wilson and Wilson 1969:Fig. 69.

72. Wilson and Wilson 1969:52; Langley 1860:127; Pacific Wine and Spirit Review March 6, 1894:16. Wilson and Wilson (1969) hold that Fargo was not a member of the partnership. The San Francisco business directories through 1868 indicate that he was.

73. Langley 1869:227, 348, 643, 1875:758. For Haviland's earlier career, cf. Langley 1862:191, 1869:296, 1871:312.

74. Langley 1873:343, 1874:367, 1878:483; Francis, Valentine & Co. 1879:410, 483, 913, 1880:947; Pacific Wine and Spirit Review Oct. 5, 1894:15, April 20, 1895:26. Wilson and Wilson's (1969:52) report that Kellogg withdrew from the company in 1877 is clearly in error.

75. California State Archives, Trademark Application No. 613, July 12, 1880. Wilson and Wilson (1969:10) report that the bitters were on the market by 1875.

76. Francis, Valentine & Co. 1887:1288. Wilson and Wilson's (1969:131) statement that the proprietorship of Peruvian Bitters passed to J. J. Mack & Co. in the late 1880s is incorrect (cf. Merchant and Viticulturalist, [San Francisco] Sept. 8, 1889:4; Pacific Wine and Spirit Review March 8, 1890:6, March 22, 1890:15, Feb. 28, 1891:12, March 30, 1891:26).

77. Wilbur 1891:1438, 1894:1483; Pacific Wine and Spirit Review March 6, 1894:16.

78. Wilbur 1892:687, 1893:686; Crocker Co. 1896:754; Pacific Wine and Spirit Review Oct. 5, 1894:14.

79. Painter 1895:842; Crocker Co. 1896:882, 1897:961, 1900:957; Pacific Wine and Spirit Review April 20, 1895:26, June 22, 1895:14.

80. Pacific Wine and Spirit Review May 7, 1895:24; Wilbur 1894:1483; Crocker Co. 1896:1636, 1905:1947, 1918:1779. The firm's name was not included in the directory of 1919.

81. Crocker Co. 1900:1024, 1905:2024.

82. For illustrations of complete bottles, see Wilson and Wilson (1969:Fig. 74).

83. Irwin 1857:81; Crocker & Co. 1866:137, 1873:front cover; Pacific Wine and Spirit Review March 20, 1897:13; Wilson and Wilson 1968:121, 1969:56; Wine Dealers' Gazette Sept., 1872:2.

84. Langley 1872:550, 1875:617; Wilson and Wilson 1968:121; Crocker Co. 1896:1432, 1897:1438; Pacific Wine and Spirit Review March 20, 1897:13.

85. Wilson and Wilson 1969:56.

86. Although -- to judge by the frequency of the bottles in western sites -- Siegert's Angostura Bitters was a widely known product in nineteenth-century America, little historical information is available here concerning Siegert or his product. The present historical account consequently derives largely from information supplied by J. D. Lewsey of Angostura Bitters (J. G. B. Siegert & Sons) Ltd., Trinidad.

87. Rack 1868:262-263; Hiss 1906:171-172. The company did not register the term "Angostura" as a trademark until 1879 (Trademark 7258, U.S. Patent Office Official Gazette May 6, 1879:695); for legal disputes over the name Angostura Bitters, see Abbott's Bitters (above).

88. All of the nineteenth-century ads we have seen are in trade journals; see McKesson & Robbins 1887:167, 1895:249; Mida's Criterion May 5, 1890:31; Wine Dealers' Gazette May, 1873:1. For a typical early twentieth-century ad, see Life May 8, 1902:407.

89. McKesson & Robbins 1877:63, 1887:104, 1895:113; Lebenbaum & Co. 1879:8; Weeks and Potter 1890:147; Goldberg, Bowen & Co's Monthly Price Current July 1, 1891:16, Jan., 1897:16, July, 1900:14, Jan., 1902:14; Redington & Co. 1891:92; Langley & Michaels Co. 1897:111.

90. Cf. Life Sept. 12, 1907:303 for a typical example. On the eve of the war, Angostura ads were noting both German and British appointments, but the bottle label featured prominently only its connection with the kaiser (The Master Grocer, [Goldberg, Bowen & Co.] Summer, 1914:8).

91. Andreae 1973:124.

92. Life Oct. 28, 1909:601, Apr. 7, 1910:652; Family Visitor (Andrew Sbarboro, San Francisco) Aug., 1868:4; Lebenbaum & Co. 1879:8; Goldberg, Bowen & Co's Monthly Prices Current July 1, 1891:16, Jan., 1897:16, Jan., 1902:14; Louisville Liquor House 1899:17; Pharmaceutical Era 1900:207.

93. United States Centennial Commission 1876:202.

94. Martin 1959:97; Wilson and Wilson 1969:62; California State Archives, Trademark Application No. 88, filed Jan. 10, 1867.

95. Wilson and Wilson 1969:62, 82; Culver 1851:26; Colville 1854:63; Langley 1864:272.

96. Langley 1868:82.

97. *Overland Monthly* Aug., 1879:xv.

98. *Sacramento Union* Jan. 1, 1869:4. Cf. *Woodhull & Claflin's Weekly* June 24, 1871:16.

99. *Sacramento Union* Jan. 1, 1869:4; Lebenbaum & Co. 1879:8; Weeks & Potter 1890:146; Goldthwaite 1898:6; Pharmaceutical Era 1900:255.

100. Gibbons 1874:18-19.

101. Trow 1870:1139; Trow City Directory Co. 1876:1374, 1877:1455.

102. Wilson and Wilson 1969:82; Langley 1872:442.

103. Trow 1871:719-720; Trow City Directory Co. 1874:519, 1879:954.

104. Francis, Valentine & Co. 1881:637, 1885:793, 1226; Wilbur 1894:963, 110; Langley 1864:272; *San Francisco Chronicle* Feb. 16, 1895:18; Pharmaceutical Era 1900:255.

WINE BOTTLES

Unlike the containers for other alcoholic beverages, wine bottles in the last century showed very little stylistic variation. Not only was bottle morphology very conservative, but the varieties that do occur can be associated with traditional European styles and thus attributed to some extent to specific regions from which the wine originated. This stylistic differentiation is particularly important since, with the exception of occasional shoulder seals, the wine bottles do not bear embossed labels.

The thousands of wine bottles in the Old Sacramento collection can be assigned to as few as six styles. Rhine wines were bottled in vessels of two types, both made of reddish brown glass. Bocks bottles were squat, bulbous oval vessels which held about 24 oz of wine. The bases have a shallow push up. Only four specimens have been recovered in Old Sacramento, and none retains the neck or finish.

Hock bottles, which also contained Rhine wine, were considerably more numerous -- several dozen being present in the collection. These tall tapering bottles lack discernible shoulders (Fig. 23a). Like the bocks bottles, they have relatively shallow push ups, but are somewhat larger, holding about 26 oz. The finish is a laid-on ring.

a b c d

Figure 23. Wine bottles (not to scale): a) Hock style for Rhine wine; b) Champagne style; c) Bordeaux style, with the typical high push up clearly visible; d) Bordeaux style with shoulder seal.

We are uncertain how distinctive Madeira bottles were. We have no complete specimens clearly definable as such. One neck and shoulder fragment of olive green glass, however, bears an applied "Old Madeira" seal (Fig. 27b). The shoulders of this specimen are more pronounced, and the neck a bit shorter, than the Bordeaux style bottles which it otherwise resembles, and the laid-on ring finish is more string-like than are the bands of glass on Bordeaux finishes.

French wines were imported in three readily distinguished styles of glass containers. Glass bottles of very large size (demijohns, jeroboams, etc.) were occasionally used. The exact shapes are difficult to determine, since all those in the collection have been broken, but they appear to be squat bulbous vessels with very shallow push ups and sloping-collar finishes. They are usually of dark olive green glass, though occasionally a much paler transparent green occurs.

Bottles of the remaining two types are much more common in the collection than specimens of any of the foregoing types, occurring by the hundreds. Champagne style bottles, which occur in both 13-oz and 26-oz sizes, are made of heavy, dark olive glass with gradually sloping shoulders (Fig. 23b). They uniformly have very high push ups and a lipping tool finish.

Bordeaux style bottles are of somewhat thinner glass, which is also sometimes of a lighter shade of olive green. These bottles have more well-defined shoulders than do champagne bottles, but they too are characterized by a high push up (Fig. 23c). The finish is usually a laid-on ring, quite casually applied. They occur usually in 23-oz and occasionally 32-oz sizes.

Most of these last bottles were undoubtedly imported containing Bordeaux wines -- predominantly claret -- but there are exceptions to this rule. Besides the products of the Bordeaux vineyards these bottles were used for other wines, including Hermitage, from the department of the Drome. Even Swiss absinthe seems to have been marketed in Bordeaux style bottles. In addition, beginning in the 1860s, California's glassworks produced bottles of this style, although those we have seen are of darker glass and with more finely made finishes than their French counterparts.

A final important characteristic of the Bordeaux style bottles is that, in the form of applied shoulder seals (Fig. 23d), they provide our only examples of embossed wine labels.

The 15 wines represented in the Old Sacramento collection by shoulder seals include one from California, one presumably Portuguese, and a third which has not been identified. Twelve wines, or more than two-thirds of those represented by shoulder seals, were French, shipped from Bordeaux; ten were produced in that region. In addition, 15 glass stoppers, which are of Bordeaux manufacture and are known to have been used by winemakers in that area, were recovered.

The preponderance of Bordeaux wines among the labeled bottles in the collection reflects their early popularity and availability on the West Coast. Claret, or Bordeaux red, served at San Francisco businessmen's lunch in the 1850s, was standard on the city's market by midcentury.[1]

These wines are represented by bottles found at other nineteenth-century sites in California, as well as in other areas.[2] More, in all likelihood, will be found in future work. It has seemed worthwhile, therefore, to include here a brief examination of Bordeaux's wines and its nineteenth-century wine trade.

Wines of the Gironde

The department of the Gironde, of which Bordeaux is the capital, is considered the largest fine-wine growing region in the world. Its vineyard area, although reduced by almost half from its maximum expansion in the 1870s, now totals 103,000 ha.[3] Geographical names -- districts, which include Médoc and Graves; villages such as St. Julien, Barsac, Sauternes, St. Emilion -- have become synonymous with fine wines.

Bordeaux's trade was founded on the region's rivers. A wide curve in the Garonne provided the town's fine harbor, while both the Garonne and the Dordogne facilitated early trade with the upper country. Twenty-five km below Bordeaux, both rivers join to form the Gironde, which opens to the sea.

The soils of the region are varied, and minute differences are noted from one vineyard to another. However, three broad categories of soils, commonly acknowledged in the nineteenth century, gave their names to types of wine produced from them: coteaux, or côtes -- hills, sloping lands; graves -- gravelly soils; palus -- marshlands.[4]

Wine production in the Gironde is intensely local. Penning-Rowsell noted about ten years ago that "most growers have their own methods and even secrets of viticulture and wine-making." Differences among wineries and viticultural areas were apparently still more pronounced during the last century. Until the massive replanting that began in the 1880s, grape varieties, for example, were more numerous than those today. Some were grown only in two or three townships.[5]

Annual wine yield around a small town could range widely, as at present: from three or four tonneaux (the standard Bordeaux wine measure, 900-925 l) for a small vineyard to more than two hundred tonneaux for a major grower. Quality at times varied as much as quantity. It was possible for a township to produce in the same year a classic vintage, of the kind which evokes adjectival rapture among some connoisseurs, and part of the blend in a low-grade cargo wine, pithily described as "trash."[6]

None of the Bordeaux wines represented in the Old Sacramento collection comes from a vineyard that has been distinguished as great. Of the ten wines, two could have been fine; four were definitely of good-to-superior quality, with another two probably good-ordinary; and two, although they have elegant generic names, may have been cargo wines or adulterations.

Great and fine wines were advertised by reliable West Coast merchants from early in the gold rush on. Old Sacramento's sample, however, seems best summed up by a San Francisco market notation in 1860:

> Dry wines continue very quiet, and purchasers for choice qualities are extremely rare. Ordinary descriptions are in better supply...[7]

The shipping of poor, imitation, and fraudulently labeled wines from Bordeaux to America was, unhappily, a pervasive practice, documented from the 1830s into the early 1900s. Wine merchants were directly, and often unabashedly, responsible for the quality of these exports.[8]

The nineteenth-century Bordeaux wine merchant is, on the whole, a controversial figure. There is no doubt of the importance of merchants in the growth of the Gironde's wine industry. Their activity and commercial ability are evident in the early development of the American market. In 1825, the United States imported only 12,141 hl of Bordeaux wine; in 1852, the importation was 188,104 hl. Total exports from the Gironde more than doubled between 1849 and 1869.[9]

As obvious as this expansion of the market, however, are two less agreeable aspects of the nineteenth-century trade. One was the control of the wine industry by merchants, a virtual tyranny which was not successfully contested by growers until the late 1860s. A second factor was the flagrant dishonesty of unscrupulous firms.[10]

Commercial domination of the Bordeaux wine industry for much of the nineteenth century was due to the fact that, except for the reputations of a few great vineyards, "the name of the merchant sold the product." The grower was completely dependent on the merchant for the disposition of his vintage, and the merchant was the absolute arbiter of price.[11]

By mid-eighteenth century, the Gironde's wines were purchased on a sliding scale based on the merchants' classification of some of the area's fine wines. Injustices possible under this system were noted bitterly in 1838 by Lecoutre de Beauvais, editor of the pro-grower journal, <u>Le Producteur</u>:

> In our department, which includes 12,000 vineyard owners, meaning 12,000 properties, are the classed growths in proportion to this number? Four firsts, of which one [Haut Brion] has been blacklisted, no one knows why, twelve seconds, thirty thirds, fifty some-odd fourths, and almost a hundred fifths...As can be seen, scarcely two hundred properties have obtained any distinction whatsoever. The rest are left in a general pell-mell, where everything is up to the whim of the buyer, whatever merit the product might have.[12]

Wine was most often bought by a broker, who represented the mercantile interest. Stendhal wrote of Bordeaux's winebrokers:

> They taste the wines of the various proprietors and, with a piece of chalk, mark the quality on the casks. You can imagine how the proprietors pay court to them! And woe betide the owner who would dare to rub out the broker's chalk mark! No broker would take it upon himself to sell that man's wine.[13]

Most of the wines of the Gironde are blended; several varieties of grapes contribute to the character of the wine. Also, carefully stored reserves from good harvests can assure a maintenance of quality.[14] Blending, however, along with the elevated prices of classed wines, provided rather stunning opportunities for profiteering.

Lecoutre de Beauvais documented the enormous profit made by "multiplying to infinity quantities classed as superior with quantities which are ignored" by giving the composition in the 1830s of one of France's greatest wines:

Château Lafitte

Lafitte	10	tonneaux at	2,400	francs
Second growth	20	"	1,800	"
Fourth growth	30	"	1,000	"
Good peasant wines	40	"	500	"
Total	100	tonneaux		

> To these hundred tonneaux are added a fifth of wines mixed from Hermitage and Alicante, when the product is destined for England, and it all goes under the name of Château Lafitte, at 2,400 francs a tonneaux.
>
> ...
>
> In an average year, Lafitte produces 90 tonneaux of first-growth wine and, because of the additions named above, it puts out 900 and more, not including those which are baptized without having received the water [i.e., fraudulent wines, containing none of the chateau's vintage whatsoever].[15]

False labeling, particularly with the names of the more renowned vineyards, was an acknowledged practice among Bordeaux merchants. It became flagrant in shipments to the United States during the 1850s, when oidium, a fungus growth, blighted the vineyards of the Gironde from 1852 to 1858, greatly reducing yields.[16] As prices increased for the limited quantities of wine available, so did unscrupulous merchandising.

An illustration of fraud from this period is the petition filed with the Bordeaux Chamber of Commerce in 1856 by the merchants of New Orleans, decrying "the bad quality of wines shipped from Bordeaux with the labels of the best-known growths in the department." San Francisco mercantile journals contain references at this time to adulterated and "trashey" wines from Bordeaux.[17]

Four wines which appeared early in Old Sacramento may have been chosen with particular care because of the shipping to America of poor or altered wines under the labels of distinguished vineyards, along with the inflated prices that the great growths commanded during the gold rush. The four (Grand Clapaud, Ad. Holagray, Château Lamothe, and Boismartin) are all sound wines. None is listed in the major nineteenth-century classifications, but contemporary wine guides note each as good or superior in its area. Also, these wineries were apparently dependable. Three are still in business; the fourth lasted almost a century. Appropriately, most of the shoulder seals representing these wines were found in the earlier levels of the Hotel de France site:[18] it is quite possible that the hotel's proprietors had a sufficient knowledge of Bordeaux's wines to obtain good, reasonably priced products.

From 1860 to the late 1870s, the price increases of the 1850s (never completely reversed), as well as favorable trade conditions and good harvests, combined to create a period of prosperity and expansion in the Gironde. The increased area in vineyards was matched by commercial development. Lecoutre de Beauvais noted 531 wine merchants in Bordeaux in the 1840s; an 1865 directory lists 791.[19]

Exports to the United States, however, failed to keep pace with either the enlarged production of Bordeaux wine or with the increase in America's population. Several highly diverse factors contributed to this slowed trade, including: the economic disruptions of the Civil War era, the development of the South American market for Bordeaux wines, the increasing consumption of beer in the United States, and possibly a reaction to the inferior wines that had been dumped on this market.[20]

The Gironde's golden period ended in the late 1870s, as the vineyards were increasingly ravaged by phylloxera. This pest, a plant louse indigenous to the eastern United States, was possibly introduced into Europe on cuttings of native American grape stock brought back in botanical collections. In America, phylloxera fed on the leaves of the native vines and had little detrimental effect on the plants. The European grape varieties, however, had evolved no resistance to the pest; it attacked the more tender roots, killing the plants. First noticed in the Gironde in 1866, the pest's initial spread was slow, but after 1875 its ravages increased until by 1882, 38,000 ha out of 141,420 ha had been affected. Ironically, most vineyards were saved by the planting, in the 1880s and on into the 1890s, of French vines grafted onto American rootstock.[21]

As the devastation by phylloxera spread, crop yields plummeted; they were still further decreased in the mid-1880s by another blight, a kind of mildew. As in the 1850s, prices rose when supplies of wine diminished. The temptation to supply established markets, no matter how, was apparently too great for merchants to resist; wine frauds reached a zenith. Casks and bottles with the labels of Bordeaux's wines contained not only mixtures of French wines with the cheapest Spanish and Italian imports, but imitations produced more in the laboratory than in the vineyard, as "the Old European art of adulterating of wines came to a height." Wine made from raisins was legitimized in France in the 1880s, and its manufacture encouraged.[22]

The dearth of sound French wines greatly stimulated the growth of the California wine industry. However, a large market for California's products had not yet developed, in part because of the "innocent ignorance," or paucity of technical knowledge, evident in many of the state's pioneer wineries, and in part because of the established preference for European wines. A San Francisco newspaperman remarked in 1890 that "the only way to sell California wine in the East is to clap a French label on the bottle." It is an irony that cases were exported from Bordeaux, like some noted in 1891, which contained not wine, but "Twelve Imported French Claret Bottles, Fine Imported Caps and Labels, Corks, Tissue Paper, Straw Covers, and Boxes neatly-printed or branded..."[23]

From the mid-1870s on into this century, an increasingly vigorous campaign by prominent men in the California wine industry stressed viticultural improvement -- quality rather than quantity -- and the promotion of the products under their own names.[24] The development of the industry is evident in modern California wines, plainly marked as such, and flourishing on their own merits.

The Gironde's wine industry today is in good condition, although an unhappy repetition of nineteenth-century mercantile fraud was exposed in Bordeaux's Winegate scandal of 1973-1974. The complaints of Lecoutre de Beauvais in 1838 and the merchants of New Orleans in 1856 were echoed during the Winegate trial. One of the chief defendants claimed that false labelling, or "baptizing, as we in the trade call it, is a common practice." The investigating team testified that some of the casks of nondescript wine, scheduled to be bottled as "appellation d'origine controlée," bore "curious markings, such as 'Bordeaux type' or 'can be used as Beaujolais in the United States'."[25]

A signal difference between the nineteenth-century wine trade in Bordeaux and that of today, as demonstrated in the furor over Winegate, is the clearly defined importance of maintaining quality control. It is evident, further, that the mercantile community is no longer mainly responsible for wine quality, but now shares this responsibility with the French government and the increasingly powerful growers.

Shoulder Seals

Early in the development of the English wine-bottle industry, which began around 1600, glass labels were applied to the containers. As part of the finishing process, a small mass of glass was pressed onto the still-hot bottle, then stamped. The earliest known examples are dated in the 1650s, and indicate ownership by well-to-do individuals and clubs or taverns.

By the early nineteenth century, glass seals also designated merchant houses, growers, vineyards, and retail shops. Products other than wine, further, came to be identified by these labels.[26] The Old Sacramento collection includes seals indicating gin, brandy, absinthe, bitters, prunes, and olive oil. The largest number in the collection, however, refer to wine; there are 46, all of olive green glass.

<u>B.B. & C.</u>

The five shoulder seals embossed with these initials (Fig. 24a) represent an unknown firm, and the product is only assumed to be wine. All of the specimens recovered were from 1880s trash deposits.

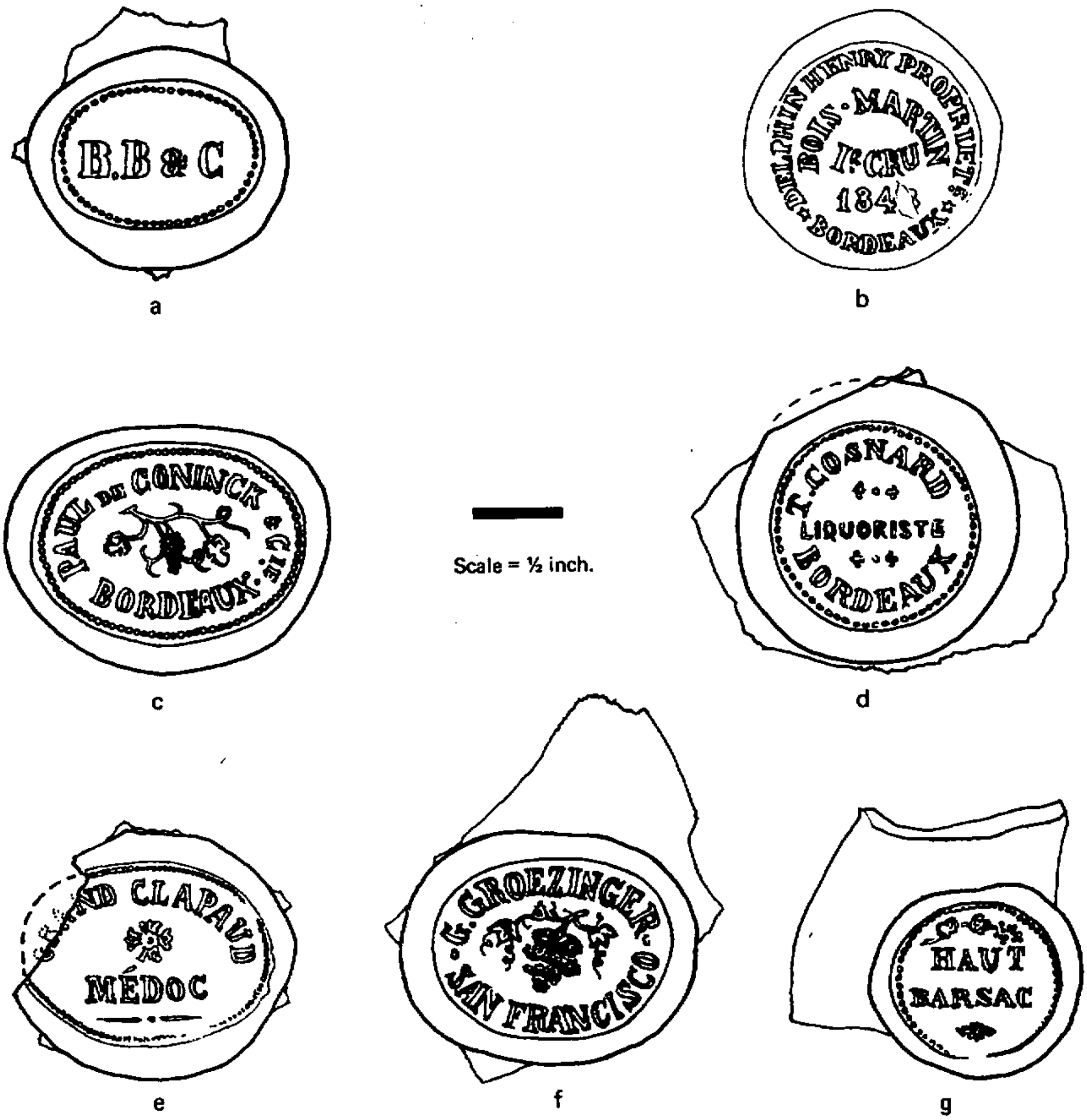


Figure 24. Wine shoulder seals: a) BB&C; b) Boismartin; c) Paul de Coninck & Cie.; d) T. Cosnard; e) Grand Clapaud; f) Gottlob Groezinger; g) Haut Barsac.

Boismartin

This shoulder seal, which specifies vineyard, owner, vintage, and quality ("DELPHIN HENRY, PROPRIETE, BOIS-MARTIN, 184-, 1 R CRU, BORDEAUX") (Fig. 24b), provides the most detailed information of any wine label in the Old Sacramento collection.

An 1840 map of vineyards in the Leognan area indicates "Bois de Martis" in the place shown on later maps as Boismartin, but the first available mention of the winery is in 1868. D. Henry is listed as owner, and production is given as 15 to 20 tonneaux of red wine a year. Boismartin's position in the list of the area's wineries indicates that Henry's wines were superior, as he claimed in the designation, premier cru.[27]

Since this wine is dated in the 1840s, it can be assumed that Henry owned Boismartin by that time or, at the latest, by the early 1850s. In 1886 the winery, a victim of the contemporary proliferation of elegant titles, is listed as "Château Boismartin," owned by J. Sandré, who continued as proprietor until after 1898. The last notation found for Boismartin is in 1949.[28]

Nineteenth-century wine authorities agreed on the quality of Leognan's wines, observing that the area produced some of the best graves. Wilhelm Franck added that these wines kept a long time and travelled well.[29]

Paul de Coninck & Cie.

This seal represents the wine-merchandising firm of Paul de Coninck & Cie. of Bordeaux (Fig. 24c). The upper portion of the bottle was recovered with the seal; the neck exhibits twist marks, while the lip is sheared and fire-polished, with a laid-on ring.

De Coninck & Cie. were exporting wine to California at least as early as 1859, for in that year Ed. de Rutte of San Francisco advertised "Paul de Coninck's fine old Claret Wines." The firm is listed, along with 790 competitors, in an 1865 directory of the wine merchants of Bordeaux, as: "Coninck, (Paul de), Monod et Guiraud, Cours du Chapeau-Rouge, 28."[30]

T. Cosnard, Liquoriste

This shoulder seal (Fig. 24d) represents a wine-and-spirits firm in Bordeaux, but we have no information on Cosnard.

Grand Clapaud

Represented by two shoulder seals (Fig. 24e), Grand Clapaud's wine is a demonstrably early arrival in Sacramento, since one of the seals was found in the buried ashes of a store that burned in November, 1852.

The history of the Grand Clapaud winery in the 1830s and 1840s is a splendid example of vineyard speculation in the Médoc at that time. Records from 1838 to 1853 show dizzying changes in ownership for this establishment and its neighbors. The vineyard, located in the environs of Blanquefort, is first listed as Clapau, or Clapeau. It was owned in 1838 by a Monsieur Yenick, who is noted in February as having sold 25 to 30 tonneaux of better quality red wine, vintage of 1837, at 350 to 450 francs per tonneaux. By February, 1839, the vineyard had been taken over from Yenick by Aman Changeur, a wine merchant at Bordeaux.[31]

The 1839 list of vineyards around Blanquefort is particularly interesting. Of 27 establishments producing second-quality red wine (only one winery is classed as first-quality), 18 show recent changes in ownership. The powerful Bordeaux wine trade is represented not only by Changeur's acquisition of Clapeau, but by the takeover of a nearby winery by Amédée Tastet, later one of Bordeaux's leading wine merchants. Changeur and Tastet conducted at least one transaction together; in November, 1840, a wine sale is listed at Saint Medard D'Eyran, with Tastet as broker and Changeur as buyer.[32]

Changeur owned Clapeau only briefly. Among the sales for May, 1840 is one of 52 tonneaux of 1837 and 1839 wines from the Cru du Grand Clapeau, owned by the Lavaissiere heirs. In 1845, the vineyard is listed as Grand Clapaud; no owner is given.[33]

The place, which is something of an orthographic wonder, becomes Clapot in 1853, with M. Chauvot as proprietor. It is listed as Clapot until 1876 when, under the ownership of the Avril family, the establishment aggrandizes, typically for this period, into Château Grand Clapeau Olivier.[34]

Since the vineyard was listed as Grand Clapeau or Clapaud in the 1840s, it seems reasonable to assume that the wine represented by these shoulder seals was bottled between 1840 and 1853, when the name of the place changed.

The red wines of Blanquefort were described in the last century as good ordinary. Lecoutre de Beauvais commented that their pronounced bouquet developed after some time in the bottle, an appropriate quality for wine to be shipped.[35]

Château Grand Clapeau Olivier is still producing wine; it was classified in 1932 as bourgeois superior.[36]

G. Groezinger

This shoulder seal, embossed "G. GROEZINGER/SAN FRANCISCO" (Fig. 24f), is of particular interest in that it is among the few specimens in the Old Sacramento collection clearly deriving from the early California wine industry.

Like many other pioneer winemakers in the state, Gottlob Groezinger was a native of Europe. He was born in Rentlinger, Württemberg, in 1824, and emigrated to California in 1848. Apparently, Groezinger operated a store in Yuba County for several years, then took up residence in San Francisco, where he became a naturalized citizen in October, 1856. For the following three years he worked as a commission merchant, and was either merchandising California wines or manufacturing his own on a small scale in 1858.[37]

In 1860, Groezinger & Co. leased a warehouse in the city and installed winemaking equipment. The venture was reported in some detail in a San Francisco paper:

> Contracts have been made with parties owning vineyards adjacent to Sonoma, for upwards of 300,000 pounds of grapes; some of these are already being delivered, the purchaser paying 3-1/2 cents per lb in bulk...The capacity of the establishment is said to be equal to the use of 10,000 lbs. of grapes daily.

> The premises are so constructed and regulated as to insure a uniform temperature. Six cisterns, of 800 gallons each, and six reservoirs, of 1,200 gallon contents in the aggregate, constitute the receiving vats for the juice of the grape, in its various stages of fermentation. The cisterns are so constructed as to exclude all air from without. A small glass tube in the top permits the escape of air from the juice during fermentation -- a new principle, we are given to understand, and differing materially from the process employed at other establishments in the State.
>
> The wine to be manufactured is styled 'Red,' partaking much of the character of Claret, and designed as a substitute for the latter in the market. The price at which it can be afforded has not been communicated to us.
>
> The establishment is complete in all its departments. The cellars are large and admirably arranged; 360 pipes, of the capacity of 140 gallons each, constructed of the best and most desirable materials, are already in position for the reception of the wine, as soon as pressed, which is conveyed to them from the reservoirs by means of gutta percha hose. The production of wine the present season at this press is expected to reach 30,000 gallons, and pains will be taken to make only such as from its superior quality shall commend itself to popular favor.

The inauguration of the Groezinger & Co. winery occurred, however, in an era of inexperienced and less-than-exacting winemaking and of more-than-a-little-shady merchandising. It is hardly surprising that the press's account of this new enterprise is guarded in its blessing:

> Let these new wine-making projectors give us an article that shall prove fit for the table -- an article such as there can be no possible obstacle in producing -- and they have before them a generous and lavish public to supply, and that too in competition with imports that must be freighted thousands of miles, and meet a barrier of impost, before they can be landed from the tackles of the vessel that conveyed them hither. Let them make some more trash, such as we wot of, and our people will pocket their patriotism and their patronage, and be churlish enough to foster their palates, in preference to fostering what some are pleased to call domestic enterprise, at the expense of impaired health and a nauseated stomach.[38]

How long Groezinger was concerned with this winery is unknown; the operation may have been short-lived, or it may not have been his major interest. For the following 30 years, however, Groezinger worked in the wine industry, as a merchant and as a producer.

In 1861, he was listed as an agent for California wines, at the southwest corner of Front and California streets. At the same address in 1862, he was joined by Charles Groezinger (relationship unknown) and Frederick Erbe as partners in Groezinger & Co., "manufacturers [of] starch and agents [for] native wines." In 1863, however, Gottlob was again listed as a commission merchant, in business at 220 Front Street.[39]

A year later, Groezinger was established on the northwest corner of Pine and Battery streets, where he remained until 1880 as a wholesaler of native wines and liquors. Apparently the business did well; in 1870 Groezinger purchased a farm of several hundred acres near Yountville, and immediately had constructed the largest winery in the Napa Valley. From 1870 to 1880, he continued to live in San Francisco, but divided his time between his business in the city and the development of the Yountville property.[40]

Groezinger's winery, noted as "one of the most striking objects that attracts the eye of the traveler up the Valley,"[41] was described in 1873:

> The main cellar structure, built entirely of brick (a quantity of which was made on the spot), is 150 by 80 feet, and two stories high. Its wine capacity is 400,000 gallons. At the north end of the building, a wing extends back 84 feet, and is 60 feet wide, the same height of the main building, with a cellar underneath. Joining on to this wing, and running along the back of the main edifice, is the fermenting room, 105 feet in length and 30 in width. A portion of this room is used for steaming and cleaning casks, etc. The roof of the fermenting room is nearly level, and comes up within six feet of the eaves of the main cellar. This roof is very strongly built, and is on a level with the upper story of the cellar. On this is all the grape crushing done, in the open air, skylights being fitted in directly over large fermenting vats below, into which falls the juice from the crushers. These crushers take a box of grapes, containing from 55 to 60 pounds, every seven seconds, and their capacity for juice is from 6,000 to 6,500 gallons per day. A platform leads from the roof to the ground, and one also from the upper floor of the cellar, and as a load of boxes of grapes is pulled up on platform by a horse below, a load of empty boxes goes down the other one. On this roof is also made all the Port, Muscatel, Sherry and Angelica. Two hydraulic presses that have a power of thirty tons each, are used in this establishment to press the pumice [sic].[42]

It was also observed that a railroad switch line ran within a few feet of the wine cellar.

When Groezinger acquired the Yountville property, only 20 acres were planted in vines, all of the mission variety. Much of the wine produced from mission grapes was inferior; the "trash" denounced by the San Francisco newspaperman in 1860 was probably this kind of wine, unblended or insufficiently aged, often flat, oxidized, or vinegary. Groezinger set out numerous varieties, including Reisling, Chasselas, Tokay, Zinfandel, Malvoisie, and Burgundy. By 1877, 200 acres of foreign varieties had been planted; 100 acres were bearing.[43]

Groezinger began producing wine at Yountville in 1871. With the tendency to do things on a large scale which was to characterize his operation, he was the largest producer in the Napa Valley that year, making 80,000 gal of wine. Purchases of grapes from local growers included more than two hundred tons from the St. Helena area. By 1876, Groezinger had produced 710,000 gal of wine.[44]

The San Francisco business was apparently doing well during this time. In 1874, Groezinger established an eastern outlet with the firm of Tyson and Totten, in New York.[45] It was probably the strength of his merchandising firm that allowed Groezinger to maintain the winery from 1875 through 1878, when California's wine industry went through a severe depression.

Overproduction, inexpert winemaking, a market not only undeveloped but reduced by a general economic slump, all contributed to the depression. In 1875, "hogs, poultry, and even neat cattle were let into the vineyards to gather the vintage, preparatory to the contemplated pulling-up of the vines, and their replacement by grain or fruit trees....Wagon loads of uprooted vines entered Sonoma, and were corded up for sale as firewood around the public square of that despondent town."[46]

It has been reported that the highest price paid for grapes in 1875 was $8 per ton. It is noteworthy that Groezinger, perhaps because of a previous contract, bought then more than five hundred tons from a St. Helena grower at $23 per ton for foreign varieties and $10 per ton for mission grapes.[47]

Throughout the 1870s, Groezinger continued to expand his operation at Yountville. In 1871, he had built a 30-by-70 ft distillery "at the distance...prescribed by law" from the wine cellars. The distillery produced about one hundred fifty gal of brandy a day. Near these buildings he constructed a two-story, 50-by-100 ft brick barn, which in 1877 housed, a reporter wrote, "some of the finest horses we have seen in the valley."[48]

By 1876, Groezinger had set out, besides his grape cuttings, an orchard of about six thousand fruit trees. These included plums, peaches, apricots, and Hungarian prunes, which he is credited with having introduced into Napa County. He also was raising basket willow, using it to tie up his vines.[49]

Groezinger's pride in his place and in his wines and his "genial and hospitable" nature are evident in a report from September, 1877, when, combining business with pleasure, he gave a party. The editor of the St. Helena Star described it as "one of the most auspicious events in the history of California wine making: the formal visit of a large number of intelligent and influential city people to a wine making establishment of the interior." He reprinted the invitation for the event:

> The pleasure of your company is respectfully solicited for an excursion to my vineyards in Yountville, Napa Valley, Sunday Sept. 2, 1877. The grapes being perfectly ripe and Wine-making in full operation I have deemed this the proper time to give my friends an opportunity to see the extent of the Grape and Wine production in this section. The Boat for Vallejo leaves foot of Washington street at 7 A.M., sharp. Returning, to arrive in San Francisco at 8 P.M. same day.
>
> G. GROEZINGER
>
> Having made arrangements with the Cal. Pac. R.R. Co., for special cars, you are requested to advise me of the acceptance of my invitation, prior to Aug. 29th. Tickets will be furnished you in due time.[50]

About fifty guests arrived on the special car, and were joined at the winery by another twenty-five, for a tour of the premises, a demonstration of winemaking, and a ramble through the vineyards, for anyone still mobile after a two-hour festive lunch, including wine and champagne.[51]

In 1879, Groezinger's vineyard was described as "the most extensive and by far the most important in the district of Napa." Something of the labor involved in maintaining the vineyard, as well as what appears to be Groezinger's increasing commitment to the Yountville enterprise, is reflected in a small news item from that year. During the spring frosts, he and his workmen kept fires going from about three in the morning until sunrise, to protect the vines with smoke.[52]

Between 1879 and 1886, the California wine industry not only recovered from its depression, but expanded. Consumption of wine increased; prices for grapes rose; new vineyards and new wineries were established. This growth and prosperity were due in large part to the scarcity of French wines, resulting from the increasing devastation of vineyards in France by phylloxera (see Wines of the Gironde).[53]

Given this period of expansion and the accompanying optimism among California winemakers, it is not surprising that Groezinger decided to devote all of his time to his Yountville operation. In 1878, he had taken a partner in the San Francisco wholesale firm: Claus Schilling, who had entered the business in 1871 as a bookkeeper. Groezinger was apparently still in partnership with Schilling in May, 1880, when it was reported that a Napa Valley vintner was shipping 10,000 gal of wine to San Francisco, "consigned to G. Groezinger, who is a heavy purchaser of Napa Valley wines." At some time later in the year, Groezinger sold his interest in the firm to Schilling and Ferdinand Walter; the business was renamed Walter, Schilling & Co.[54]

In August of 1880, Groezinger began construction at Yountville of "a handsome brick residence," 40 by 70 ft, two stories high, to "contain twenty large, airy and well-lighted rooms." In 1881, he was in residence there with his family: his wife, Rosalia, and their sons, Gottlob and Emile.[55]

Groezinger's winery produced 275,000 gal in 1880. Although annual yield dropped to 150,000 gal for the following three years, Groezinger's continuing development of the place reflects the boom in the wine industry during the early 1880s. Steam power replaced horse power in the winery and the distillery; a gas works was installed, which served "not only all parts of the manufacturing establishment, but his elegant dwelling near by." A reporter observed in 1882 that Groezinger's "works are all first class and have been a vast benefit to the surrounding country, not only for their own value, but for the wholesome example they have been to others."[56]

Agricultural projects at Groezinger's place in the early 1880s included the construction of a fruit dryer for the products of the "large orchard of fine and thrifty trees," and the raising of Havana and Turkish tobacco on land which was too low for grape cultivation. A commercial nursery for rooted grape stock was also established, and was apparently successful.[57]

In 1883, Groezinger had 250 acres in bearing vines, and expected to have 350 acres bearing by the following year. He was paying other growers $30 per ton for grapes, "taking all varieties as they come, though the greater portion of them are Reislings and Zinfandels." Described as "the great wine maker of Yountville," Groezinger employed 42 men "in the different branches of wine-making."[58]

Little information has been found on Groezinger between late 1883 and 1889, although it is known that during this time his vineyard expanded to 402 acres and included 83 varieties of grapes.[59]

The wine industry's boom continued until 1886. The number of wineries in Napa County, for example, increased from 112 in 1885 to more than 175 in 1886. Then, as in 1875, overexpansion and an emphasis on quantity rather than quality started the industry into a depression, longer and more severe than the previous one; recovery did not begin until 1895.[60]

Growers' hardships were further compounded by the ravages of phylloxera. The pest, in its destruction of French vineyards, had been a major factor in California's wine boom of the early 1880s. By mid-decade, however, it was an increasingly serious threat to California's vines. Phylloxera was identified near Sonoma in 1873, but at first spread so slowly that little was done to fight it. The infestation continued to spread until after 1895; a visitor in 1896 remarked that the Napa Valley "looked more like a graveyard than wine country."[61]

News items from 1889 illustrate the campaign and the struggle of the wine industry. Major producers and merchandising firms, determined to expand the market for California wines, exhibited their fine wines at the Paris Exposition and received a total of 35 gold, silver, and bronze medals. Groezinger did not send his wines to Paris, but displayed four varieties at a San Francisco exhibit: port, Reisling, sherry and Zinfandel.[62]

An item in a trade paper of that year, however, indicates the plight of many small growers:

> The grapes of Henry Martin's fifteen acre vineyard, at Calistoga, are being picked by twenty hogs turned loose for the purpose. Mr. Martin believes that the pork will be more valuable to him than would the grapes if sold at present prices.[63]

Groezinger, although he had a large establishment and was evidently a more knowledgeable grower and winemaker than many of his neighbors, was affected both by the poor viticultural practices of others and by the general depression of the industry. He expected to make about 100,000 gal in 1889, more than 20,000 gal less than the previous year. His views on the vintage of 1889 and on some of the wine producer's problems were reported in the Napa Register in October of that year:

> In [Groezinger's] judgement, the production of the valley will be considerably less than last year and will not be of a superior quality but rather of a medium grade. The reason of this is that there were several hot spells which caused a drying of the grapes before maturity and those not well up in the science of wine-making interpreted this drying as an indication of ripeness, picking their grapes too early....In Mr. G.'s opinion the merchantable wine produced this year will hardly exceed one-half that of last year. The prices of grapes have been $7, $8, $9 and $10, with $8 as the average. Early in the season the wine makers paid from $15 to $18 for mountain grapes, all of which were very fine, but there are no more to be had now....Mr. Groezinger is quite confident that a year hence grapes will be high, the reason being that the vines of Germany and Switzerland, according to advices just received, have been badly frosted, and as this fact will necessarily affect the prices in Europe, they will naturally go up. As to the matter of phylloxera, Mr. G. was unreserved in admitting it was making steady advances and was sweeping the valley. The only remedy was to put out

> resistants and they are bearing nicely. He has great faith in them and his nursery now contains 150,000 that he will soon plant. In his opinion, it is a pity the growers in the valley did not take some concerted action to stay the ravages of this pest by pulling up the sickly vines at the start, as this might have prevented such wholesale ravages as have been made....we do nothing in common in an endeaver to eradicate that insect. If our growers would act together, there would be a different state of affairs from what there will be in a few years.[64]

The following June, Groezinger, noted as having "done as much, perhaps, as any one man in the county to further the interests of the industry," was again interviewed. By this time he was decidedly pessimistic.

> [Groezinger] this season expects to gather a large crop from his vines. In fact, appearances point to an unusually large yield....But the grape grower and wine maker have two things to contend with which have, of late, made the business an unprofitable one, viz.: the phylloxera or vine louse and the extremely low prices given for wine by the dealers.
>
> ....
>
> The expense incident to pulling up a vineyard and planting resistant stock will fall heavily upon the grower. He must first pull up his old vines, second purchase resistant stock, third plant the vines, fourth graft them (which alone entails an outlay of $50 per acre) and must also wait at least two or three years before the newly planted vineyard will come into bearing.
>
> But one effect of the vines bearing so abundantly will be to plunge the wine maker still further into debt. He must make up the product of his vineyard, his employees must be paid and storage room must be provided. To sell at the present prices offered would be suicidal, yet he must have money to conduct his business and with the industry in its present state, capital is very loth to enter and the money market is very tight. The outcome is sure. Some must go under unless prices better.[65]

Groezinger may have realized at the time that he was himself close to going under. Like many others in the flourishing wine industry of the early 1880s, he had apparently overexpanded his vineyard and winemaking operations. Also, contracts made with other growers in the boom cycle may have been financially disastrous during the depression. In June, 1890, the same month as the interview given above, this item appeared in a trade paper:

> In 1880, G. Groezinger, of Napa county, agree[d] to buy from T. Hopper, and Hopper agree[d] to sell to Groezinger all the grapes to be grown by Hopper upon his farm near Yountville for ten years. It was agreed that the grapes should contain twenty-two per cent sugar and the price was to be twenty-five dollars per ton. For five years the parties kept the contract and then Hopper sold his farm to H. M. LaRue, at the same time assigning his rights under the contract.

> In 1886 LaRue raised upon the place about six hundred tons of grapes. Groezinger refused to take any part of them. LaRue brought suit to compel the fulfillment of the contract and has gained a final decision in the Supreme Court. Groezinger's loss by the decision will be between $15,000 and $20,000.[66]

In October, Groezinger reported that his wine production was half that of the previous year, and that he had "probably half a million gallons of '89 and older wines in cellar."[67]

The following January, a one-line item in the Napa Register stated that Groezinger had disposed of his property in Yountville and was moving to San Francisco. A more detailed report appeared in that paper in April:

> It is perhaps quite generally known that Mr. Groezinger is no longer proprietor of the large cellar which has borne his name so long. The entire property [by this time about 700 acres], cellar, mansion, and vineyard, together with the machinery, farming implements and other personal property pertaining thereto, is in the possession of the Nevada bank of San Francisco.[68]

The property was purchased by A. Borel & Co., San Francisco, by August. In that month, Borel & Co. leased the winery to Groezinger's former partner in San Francisco, Claus Schilling. He had by this time bought out his partner in the business established by Groezinger; the firm was known as C. Schilling & Co.[69]

C. Schilling & Co. used the winery for only one season. In October, 1893, a trade paper reported that the winery would not operate at all that year, and that A. Borel & Co. had sold their grape crop to C. Carpy & Co., in Napa.[70]

A description of the vineyard in 1893 confirmed Groezinger's prediction of the continuing spread of phylloxera:

> A. Borel & Co., Yountville (Groezinger Vineyard)-- Total, 125 acres; in bearing, 65 acres; will replant 25 acres; infested by phylloxera, 42 acres, 30 of which will bear but one crop more; planted to resistants, 83 acres...[71]

Groezinger remained in San Francisco. He apparently worked again only briefly, as a broker in 1894. Rosalia, his wife, died in 1892, and by 1897 Groezinger was living with his son Emile. Listed in this year as an employee of Kolb and Denhard, a wine and liquor merchandising firm, Emile was by 1901 a partner in another wine and spirits company, A. Finke's Widow.[72]

Groezinger's son, Gottlob, does not seem to have had any interest in the wine industry. Anglicizing his name to George, he became first a justice of the peace in San Francisco, and then a judge.[73]

On November 15, 1903, Groezinger died at Emile's home. His obituary, probably written by Emile, refers to his achievements at Yountville and his failure "in the depression that overcame the wine business."[74]

The winery buildings still stand, and are in use as Vintage 1870, a complex of shops and eating places. Most of the businesses are housed in the large structure where winemaking took place; the main entrance and hall show the old wagon tracks. A nursery and ceramic shop occupy the remains of the distillery. A small building which served as a cooperage is now a wine shop, named Groezinger's.

Haut Barsac

This shoulder seal (Fig. 24g) was in all probability the label for a white wine of mixed parentage and less than mediocre quality, even though the Haut Barsac area of the Médoc has been famous for centuries for its fine white wines. This reputation was acknowledged early on the West Coast market. An 1855 advertisement in a San Francisco paper, for example, lists Haut Barsac with Château Yquem, one of the finest and most costly Sauternes.[75]

However, the mixing of the wines of Barsac with inferior wines, particularly for export, was a common practice among the merchants of the Gironde by 1840. Also, lesser wines were labeled as those of Barsac.[76] The seal from Old Sacramento, devoid of the name of a grower, vineyard, or merchant, is in all likelihood a fraud.

Ad. Holagray

Three shoulder seals bear the legend: "A^D HOLAGRAY/SOUSSANS/MÉDOC" (Fig. 25). Of the wineries represented by shoulder seals in the Old Sacramento collection, this establishment continued longest in the ownership of a single family. A Holagray was producing wine on his place by 1838; the last member of the family listed as proprietor there was Daniel Holagray, in 1929.

Figure 25. Wine shoulder seal: Ad. Holagray.

An 1838 map of the vineyards around the village of Soussans shows Holagray at the tiny settlement of Tayac. Less than half a mile away was Rambaud's vineyard "at the place called Siamois," which the Holagrays later acquired. Both of these vineyards produced red wine. Holagray's yield in 1838 was given as 30 to 35 tonneaux, Rambaud's as 25 to 30 tonneaux.[77]

Although the area of Soussans adjoins that of Margaux, one of the fine-wine districts of the Médoc, the vintages of Soussans were poorly regarded well into the late nineteenth century. This attitude was reflected -- and, no doubt, furthered -- by Franck, who in his 1853 work on the wines of the Médoc, commented that the earth of Soussans was less favorable to viticulture than that of Margaux, resulting in wines with fine color, strength, and very good flavor, but with some hardness, which prevented the development of their good qualities until the sixth year. He added that shipping improved them.[78]

Apparently he had expressed this opinion as early as his first (1824) edition; one of the earliest issues of Le Producteur, in 1838, contained a vigorous editorial rebuttal:

> Wm. Franck has claimed, in his treatise on the wines of the Médoc, that those of Soussans are generally inferior to those of Margaux; his work, however, is permeated with the glory of the commercial system, which consists of assigning high rank and high prices to wines produced in the smallest quantity, while demeaning similar but abundant products, in order to obtain them at extremely reduced prices, which will be inflated as high as possible once they are in the commercial domain.[79]

A fervid crusader for the growers of the Gironde, editor Lecoutre de Beauvais went on to point out that vineyards in Soussans produced large quantities of the wine used in the Margaux vintages, including that of the famed Château Margaux. After reaching a rhetorical zenith with the proclamation that the entire social fabric at the time was degenerating because of "the dry, cold selfishness of commerce," he deplored the fact that the wines of Soussans had not been accorded a classification. He then classed them himself, beginning with fourth growths and descending to wines of the palus. Holagray was listed in bourgeois secondaires, which should have sold for 450 to 500 francs a tonneau in good years. Rambaud is included in a higher class, fifth growths, which ought to have sold from 550 to 700 francs a tonneau.[80]

Other winemakers in Soussans may have been grateful for the classification, as an attempt to establish fair prices for their wines. Rambaud's response, however, was a choleric letter. He declared that his property not only produced 40 to 50 tonneaux a year, but was one of the best situated in the area, certainly entitled to be classed as fourth growth, instead of fifth, with a going price of 700 to 1,000 francs a tonneau. The correction was dutifully made.[81]

There is a notation in the list of wine transactions of March, 1840, that the 1839 vintage in Soussans marketed well, the contents of only two cellars remaining unsold. Holagray sold 16 to 18 tonneaux, at 400 francs per tonneau, to Chruse and Hirchefeld, at Bordeaux (i.e., Cruse and Hirschfeld, which in 1850 became the prominent firm, Cruse et Fils Frères).[82]

Although the Holagrays' ownership of the winery is well documented, it is difficult to determine how long Ad. Holagray was in charge of the business. References through 1845 give only the family's name, as do other listings from 1865 to 1876. In 1853, Franck notes Ad. Holagray at "Taillac"; in 1868, he gives only the surname for ownership of "Rambaud-Siamai et Haut-Tayac reunis." The Holagrays had taken over Rambaud's property in 1866 or 1867.[83]

Since Ad. Holagray was specifically mentioned in 1853 and the family name only was given in 1845 and in 1865, his operation of the winery seems to have been confined to some part of this 20-year period. The business must have prospered, judging from the purchase of Rambaud's place.

The Holagrays continued through the late nineteenth century and well into the twentieth to maintain not only family ownership, but consistency of place name. They ignored the vogue that permitted any estate with a building and a vineyard to be glorified as a château. Their final listing, in 1929, was "Cru Haut Tayac et Siamois." The winery was still operating in 1969.[84]

Château Lamothe

This shoulder seal which was reconstructed from four fragments, is embossed "...HATAU LAMOTHE/...DEAUX/...RPENTIER" (Fig. 26a). The full designation would have included Charpentier, Bordeaux.

Château Lamothe is located in Lansac, near Bourg, on the right bank of the Dordogne. The château was built at the end of the eighteenth century, and its vineyard has produced red wine since that time. Franck noted in 1868 that the wines of the Bourg area had improved both in quality and in abundance over the preceding twenty-odd years.[85]

The collections at Château Lamothe contain seals identical to the one found in Old Sacramento, except for the spelling, "Charpantier" -- apparently there was an error in the lot of bottles represented by the Old Sacramento seal. Charpantier, a wine merchant, owned the property from 1845 to 1860. Presumably he would have exported his wine during this period.[86]

The winery today produces Côtes de Bourg, designated by a label that includes a drawing of the château (Fig. 26b).

Figure 26. Shoulder seals and paper labels: a) Château Lamothe seal from Old Sacramento; b) Modern label showing the château; c) S. Larnac seal; d) 1868 paper label for Château de Larnac (California State Archives); e) S. Lognac seal.

S. Larnac

Five seals represent this wine, which was imported by Adrien G. Chauché of San Francisco over a possible span of more than thirty years. The simplicity of the seal (Fig. 26c) seems more appropriate for this wine than the elegant paper label (Fig. 26d) which Chauché had registered as a trademark for it. The small vineyard area of Larnac was located in the township of Queyrac, near the northern edge of the Médoc; the township's wines were described in the last century as, at most, good ordinary. Also, Château de Larnac, shown on the label, may have been a local landmark, but no winery of this name is listed in the nineteenth-century wine guides.[87]

If the wine was not distinguished, however, there is every reason to believe that it was sound and palatable. Chauché, whose judgment of wines was widely respected by the San Francisco commercial community, was involved with the wine trade most of his life. He was born in 1834 in Portets, in the graves region north of Bordeaux, where "all of his people were connected with the viticultural industry." At least one member of the Chauché family was listed as a vintner in this area from 1840 through 1898. Soon after Chauché's birth, his family moved to Bordeaux, where his father went into business as a wine merchant. Chauché was 17 years old and working in his father's wine firm when he was "attracted by the reports of gold in California," and set out for San Francisco. He arrived in the city April 3, 1851.[88]

Chauché promptly went to work with Sabatie & Maubec, a firm which typified successful enterprise in gold rush San Francisco. Ernest A. Sabatie, then 21, was listed in 1850 as a grocer; in 1852 Sabatie & Maubec were noted as merchants; by 1854 Sabatie & Co. had become "French importers."[89]

If Chauché had thought to join the goldseekers, the example of Sabatie's success, along with that of others in the city's commercial community, must have made it evident that the gold in the foothills was soon redistributed in San Francisco. In 1852, his father joined Chauché, and they established a business variously listed as wine merchandising and as storage and commission. The father returned to France in 1857, but Chauché remained. He was listed as importing wines and liquors in 1860, and continued in this line until 1890.[90]

Chauché and his father apparently began importing wine as soon as they established the business, and it is possible that the wine from Larnac was brought over then. Little information is available on the early years of the enterprise, however, although Chauché noted later that he had served as an expert for other importing firms from 1851 until 1864. In that year, which coincided with a period of abundance and prosperity in the Bordeaux wine country (see Wines of the Gironde), he took in Louis Martin as a partner, and they evidently expanded the operation. They were described as "French importers of wines, brandies, liquors, etc." The partnership lasted for about four years, during which time the business was moved to 615-617 Front Street, the location of Chauché's firm until 1893.[91]

In November, 1868, Chauché applied for a trademark for his Larnac wine, with an elaborate description of the label and the notation that it was to be affixed to bottles of claret. In 1872, he advertised in a trade journal as "Sole Proprietor of the Celebrated Claret Wine, Château de Larnac, S. Larnac, Bordeaux."[92]

Although Chauché continued to list his importation of wines until 1890, his chief interest in the 1880s was the development of a vineyard and winery in the Livermore Valley. A trade journal in that area noted that:

> Mr. A. G. Chauché, one of the most expert among the San Francisco wine merchants, long familiar with the trade in foreign wines, was attracted by the first vintage of 1884, and immediately purchased land for a winery where he could purchase grapes, and planted also for his own supplies; he calls his place "Mont Rouge."

Mont Rouge produced clarets and Sauternes, and was distinguished by a gold medal, one of four given to California wines, in the Paris Exposition of 1889. In 1891, Chauché was listed solely as "Proprietor Mont Rouge Vineyard and Cellar."[93]

Chauché's wife died in May of 1892; there were no children. His isolation may have contributed to Chauché's taking a partner less than three months later. He was Charles A. Bon, a young man from a pioneer French family with whom Chauché was acquainted. Chauché died suddenly in April, 1893:

> The death of A. G. Chauché, of the Mont Rouge Vineyard, Livermore, and of Chauché & Bon, which occurred on the 22d ult., was one of the saddest which has been reported for many years. Mr. Chauché was to have been married on the 26th ult. and intended to start for Europe forthwith on his wedding trip. Instead of that happy consummation, he was buried on the 26th, leaving a young bride, the sister of his partner, Charles A. Bon, and to whom he was married on his deathbed....The wedding was only twelve hours old when the gentle spirit of Mr. Chauché took its flight.[94]

Alexis Le Monnier

This shoulder seal, designating Alexis Le Monnier, Hermitage, Bordeaux (Fig. 27a), is unique in the Old Sacramento collection in that it is the only French wine seal recovered on an intact bottle. This bottle (shown in Fig. 23d) held 24 oz. It is further distinguished in representing wine from the department of the Drome, rather than the Gironde.

Hermitage was traditionally used to fortify the wines of the Gironde, particularly for the English market. An 1828 work on Bordeaux wines, for example, comments that in order to give them "some resemblance to those wines of Spain and Portugal which are used in England -- to render them of the taste preferred in that kingdom, from the effect of long habit -- the greatest part of our wine merchants who trade with England, are obliged to work them....The operation consists in mixing a certain quantity of Hermitage, and other kinds of fine and strong wines of the south, which give fire to the Claret..."[95]

In contrast to the disreputable practice of extending the fine wines of the Gironde with cheaper ones, fortification with Hermitage was both legitimate and costly. The finer wines designated Hermitage were expensive, and Lecoutre de Beauvais noted in 1841 that the Bordeaux merchants bought the superior vintages for blending.[96]

"The true and beautiful Ermitage," however, was also subject to extension. Lecoutre de Beauvais observed that, while 2,200 hl were produced in good years, 50,000 hl were sold. These figures add an ironic meaning to the comment of Cocks in 1846 that Hermitage, along with Roussillon and Benicarlo, had "become plentiful in the Bordeaux market."[97]

Alexis Le Monnier was apparently a merchant in Bordeaux, but no information on him has been found. The bottle bearing his seal was recovered in the earlier levels of the Hotel de France site, dating from the 1850s to 1870.

S. Lognac

Seven shoulder seals bearing this designation (Fig. 26e) were found in Old Sacramento. These seals are strikingly similar to those marked S. Larnac (above) which indicate wine imported by A. G. Chauché. Given also the fact that Lognac was a vineyard area in the township of Portets, where Chauché's family maintained a winery during the time he was in business, we have assumed that this wine was also imported by him.

The wines of this area were described as good ordinary.[98]

Old Madeira

A single shoulder seal (Fig. 27b) represents this wine.

The wines of Madeira, a Portuguese island off Morocco, have been an important local industry for several centuries, but, according to at least one account, it was the colonial American trade which first lent them an international prestige. Eighteenth-century vessels,

> following the westerly trade winds, made Madeira a regular port-of-call, taking on water and supplies plus a few casks of wine on their return voyage from Europe to Charleston or Philadelphia, Baltimore or New York or Boston. The sea voyage reputedly improved the wine, and a good many 18th and 19th century Madeiras, bottled in America, carried on their label the name of the vessel that transported them, and the year of the voyage.

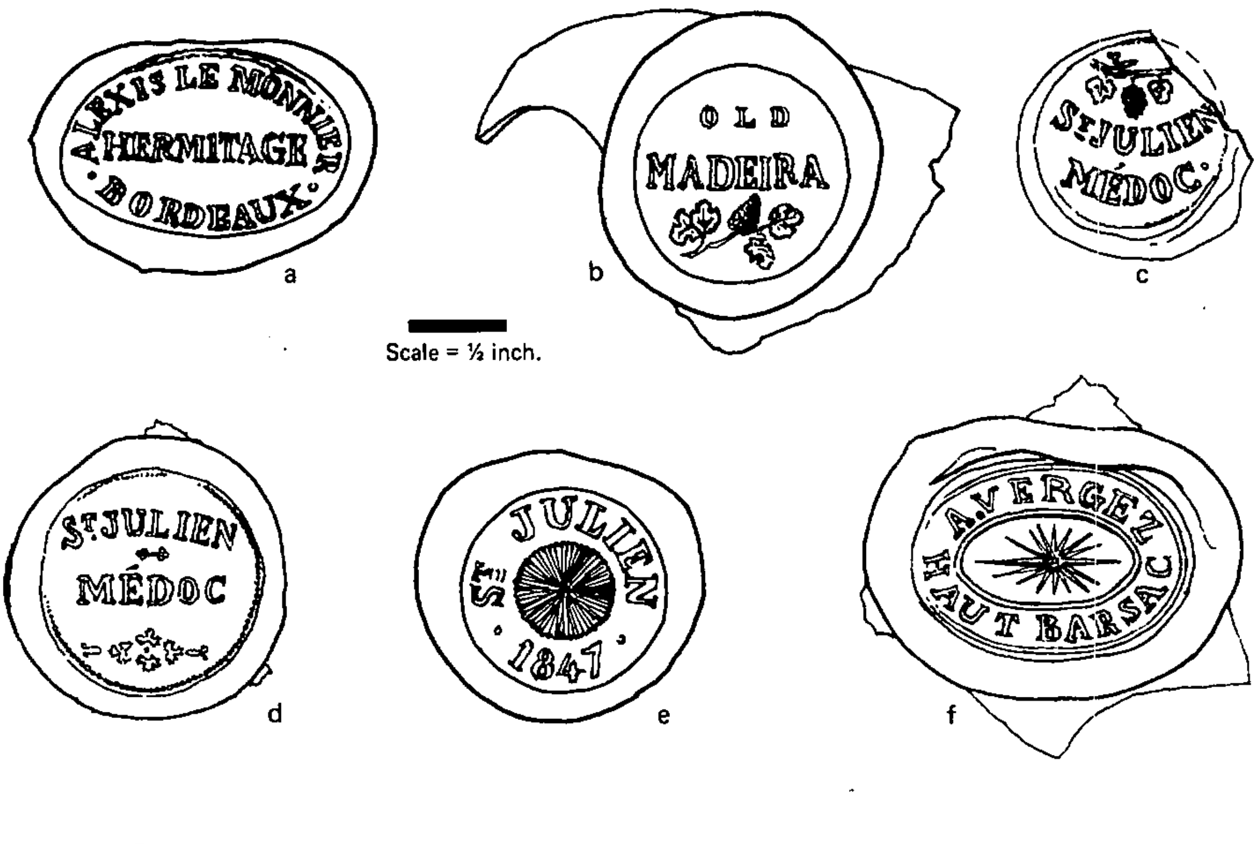


Figure 27. Wine shoulder seals: a) Alexis Le Monnier; b) Old Madeira; c-e) St. Julien; f) A. Vergez.

It has often been stated and quite possibly is true that the British taste for Madeira dates from the American War of Independence, when returning British officers spoke enthusiastically of the quality of bottles they had tasted in American cellars. In any case, a few decades later, the Madeira trade had followed the pattern set by Port, Sherry and Marsala and was largely in English hands. Like almost all European wine lands, but more severely than most, Madeira was invaded and its vineyards devastated in the late 1800's by two plagues of New World origin -- the oidium (a sort of mildew) and the phylloxera. The island's economy never entirely recovered, and it is safe to say that Madeiras of as high quality have never since been made. Nor is England and America today the principal market for Madeira: France (where it is used principally in cooking), Sweden and Denmark each import more than our modest annual total.[99]

There is no question, however, that Madeira, or what passed for it, was very popular during the California gold rush, and the wine frequently was described as old. Hort Brothers, on Front Street in Sacramento, for instance, announced in August, 1850, that they sold Old Madeira, while Sacramento auction listings a year later included "12 cases Old Madeira wine, qts" and six cases of the same in pints. Old Madeira is also listed on a menu of the Ward House printed on Dec. 27, 1849, and on one from Sacramento's Columbia Hotel printed July 24, 1850. Finally it is worth noting that another Old Madeira shoulder seal was excavated at the site of the ship Niantic, in San Francisco.[100]

The fact that Madeira is a fortified wine surely had much to do with its popularity. Unfortunately this also made it easier to counterfeit, and many of the argonauts eagerly savoring "Madeira" may have been unknowing patrons of home industry:

> By passing the oil of whiskey through carbon, a Madeira is made, at a profit of five hundred per cent, which few can tell from the genuine. Madeira grows thirty thousand barrels of wine yearly, while America alone boasts of the annual consumption of fifty thousand barrels of the same article. These wines are produced at a very trifling cost by the use of neutral spirits, or even with "whiskey, vinegar, sulphuric acid, beet-root, alum, lead logwood, potash, cider, copperas, and the like." Of these and other wines, the city of New York manufactures to the value of eight million dollars every year, and these go out to be employed largely in the mere formation of intemperate habits, that by and by must and will have something stronger for their support.[101]

St. Julien

The most numerous shoulder seals in the Old Sacramento collection are those indicating wines from St. Julien. There are 14 of these seals, 12 of them embossed "S^{t} JULIEN/MÉDOC." The other two are labeled "S^{t} JULIEN/1847" (Fig. 27c-e); one is still attached to the upper part of a bottle, which preserves a twist-marked neck and a sheared and fire-polished lip with a laid-on ring. The finish is unusual, however, in that the lip appears beveled. Traces of foil are still evident on the finish.

St. Julien, a township "remarkable for the excellence of its products," is located in Haut Médoc. Eleven of its vineyards were distinguished by inclusion in the prestigious 1855 classification of Médoc wines. The area produces red wines, and Penning-Roswell remarks that "St. Juliens at their best are perhaps the quintessence of claret."[102]

It is very doubtful that the wines represented by these shoulder seals were worthy of their name, since there is no designation of merchant, grower, or vineyard. In all probability, the bottles sent to Old Sacramento held the blended product of any number of the Gironde's lesser vineyards. The wine merchants of Bordeaux in the mid-nineteenth century put this rather bluntly:

> "...it is customary since time out of mind to ship to the United States, under the generic name of Margaux or Saint Julien, ordinary cargo wine. The San Francisco Customs claims the right to rank these wines with those of Saint Julien and Margaux, based on the name given them. Our response to this is that it is an injustice, because the latitude in this matter has been accepted in the United States, where everyone knows that the most common wines of Bordeaux are labelled Saint Julien or Margaux..."[103]

As American customs rated wines on an ad valorem basis, and based their ratings on the cost of château-bottled St. Julien, the price to the unenlightened consumer must have seemed to match the distinguished label. Judged by the frequency with with St. Julien seals are recovered from the Old Sacramento deposits, these wines were quite popular. As a transoceanic voyage has been sometimes reported to improve the quality of such blends, we must conclude, in charity, that they reached the table in California a better product than when they left Bordeaux.

The 1847 vintage was a good one in the Bordeaux region, both in quality and abundance, for Sauternes as well as for clarets. Because of economic uncertainties which culminated in the political upheavals of the following year, the wines of 1847 were the subject of much speculation and were at first disregarded and very cheap. Later, however, they had great success, particularly in northern Europe and the United States.[104]

Franck noted in 1868 that the wines of St. Julien took longer to mature than those of neighboring townships, requiring five to six years in the cask.[105] Thus the 1847 seal would have been applied to the bottle in 1852 or 1853.

A. Vergez

This shoulder seal, marked "A. VERGEZ/HAUT BARSAC" (Fig. 27f), should indicate a fine white wine from the Sauternes area (see Haut Barsac, above). Unfortunately, we have not located any information on A. Vergez.

Closures

Three kinds of closures for wine bottles were found in Old Sacramento. Two of these are glass stoppers, plain and threaded, and one is a foil seal which covered the cork of a champagne bottle.

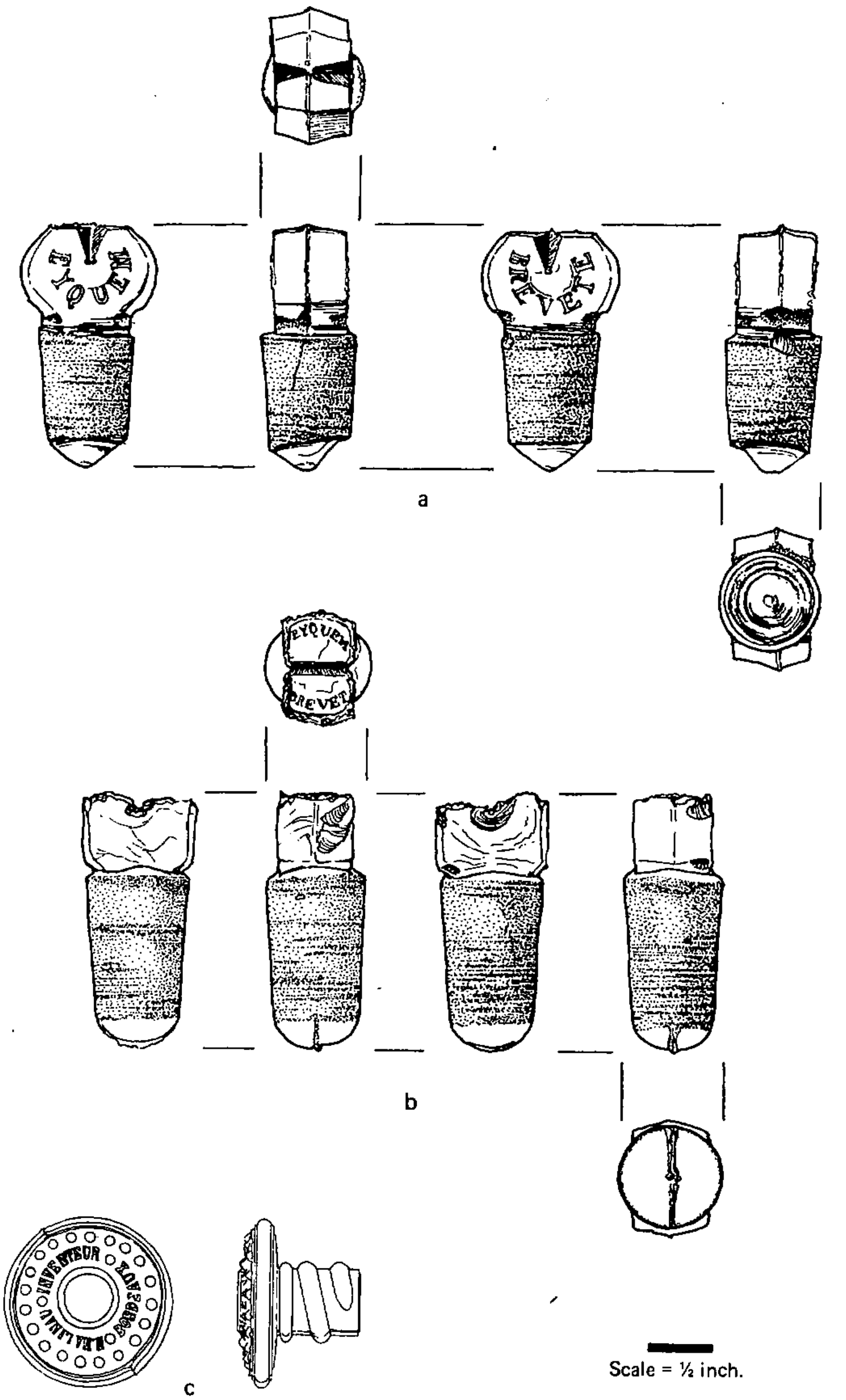


Figure 28. Glass wine closures: a-b) Two variants of the Eyquem stopper; c) Malineau stopper.

Eyquem Stoppers

Glass stoppers with heart-shaped handles embossed "EYQUEM//BREVETE" are among the most commonly occurring labeled representations of the wine trade recovered in Sacramento (Fig. 28). Fifteen specimens have been recovered, made in clear, aqua, and pale pinkish glass.

Eyquem indicates not one of the various estates of that name, but a Bordeaux bottler and inventor, who was active in the 1840s or 1850s:

> There have also been attempts to close bottles with glass rather than cork. M. Eyquem was the first to make bottles in this way, stoppered like flacons. His process was fashionable for a long while, and several proprietors of great crus, among them M. Destournel, put a large quantity of wine into M. Eyquem's bottles, even though they were rather high-priced. After several years, it became evident that this wine, completely deprived of air, was not aging like cork-stoppered vintages. So, although this method is very valuable for preserving wine a long time, the wine does not acquire the mellowness or bouquet that it takes on after several years in corked bottles. This is both good and bad; if it is unfortunate for slightly young wines, it is very valuable for those which have aged. It would probably be possible to preserve indefinitely vintages which have aged and acquired all their qualities by decanting them into bottles with glass stoppers, following Eyquem's method. But for newer wines, glass closures cannot equal cork. Several other bottle manufacturers have followed in the footsteps of M. Eyquem, and sought ways to close bottles with glass. This effort has resulted chiefly in various closures for preserved food, in which there is a considerable business at Bordeaux. All of these stoppers shut out air completely and consequently have the same disadvantage for wine as Eyquem's method.[106]

The fact that most of these stoppers in Sacramento come from saloon trash deposited in the 1880s may indicate either that Eyquem continued to produce them that late, or more likely, that American tavern keepers retained them for use in their bars. The stoppers had the practical advantage of a hermetic seal for opened bottles, and they lent an appearance of elegance to otherwise commonplace wines.

Malineau, Inventeur, Bordeaux

This label is embossed on four specimens of a unique style of glass stopper, made of black glass, with a threaded shaft surmounted by a horizontally flattened, round handle or head (Fig. 28c).

Malineau was the inventor and producer of the stoppers. As indicated in regard to Eyquem, most of the glass stoppers in use during the nineteenth century had the disadvantage of preventing any passage of air through the closure, thus stopping the wine from aging once it was bottled. D'Armailacq wrote in 1855 that

M. Malineau has apparently resolved this problem; his stoppering method deserves to be widely known. He also employs glass closures, but these can be inserted and removed without the difficulties often encountered in the use of M. Eyquem's stoppers, which are such that at times it is impossible to open the bottles. It suffices to turn M. Malineau's stopper to the right to tighten and to the left to loosen and release; this is always easy. M. Malineau's bottles all have necks of the same size. Inside is a projection, a ledge, of about 2 mm, which is divided into three parts, so that three projections alternate with as many smooth places. Each of the projecting parts slants a little to the left. The stopper is made in the same way, with a ledge divided in three parts. The projecting sections of the stopper fit between those of the bottle's neck; turning locks the stopper tightly, while returning it to its original position releases it easily. These stoppers can seal hermetically. In order to prevent the passage of any air whatsoever, M. Malineau has fitted them with small rubber washers, which cut off the air perfectly. When, however, a closure is desired which is not completely hermetic, a cork washer is used instead of the rubber one. This permits the passage of air. This method seems to provide for all contingencies, and when a sufficient number of years has passed to ascertain its good effects on wine, it should come into general use.[107]

Piper-Heidsieck Champagne

A single foil seal, embossed "H. PIPER & C^{o}/RHEIMS," from a champagne bottle was found, a swan among pigeons, in the remains of the 1860s privy pit of Hannon's saloon -- a working class bar on K Street. Champagne had been downed in more incongruous settings in the West than Hannon's, however, for it ranked high among the desiderata of celebrating miners in the board-and-canvas boomtowns of the early California gold rush. When the steamboat Bertrand, bound for the Montana gold fields, sank in the Missouri River in 1865, the cargo included more than two hundred bottles of champagne.[108]

Some of the Bertrand bottles bore lead foil seals identical to the Sacramento specimen, the company designation encircling a grape cluster and leaf motif, and the firm and city names separated by small stars. Between the words and the grape cluster is a circular border of twisted-cord design, which is broken by the name "DUPREE" in tiny letters.[109]

The popularity of champagne in America was due, first, to the taste for it already developed in Europe. A wine-fancier observed in 1882 that "...wherever the civilized man of the nineteenth century has set his foot...he has left traces of his presence in the shape of the empty bottles that were once full of the sparkling vintage of the Marne."[110] It is possible that "civilized" is a key word here; the champagne of France has traditional connotations of ceremony, refined manners, and comfortable economic position, as well as of luxurious taste. In the nineteenth century, even more than in the twentieth, the bubbles in the glass symbolized social status, along with pleasure.

The American consumption of champagne was due also, appropriately for this foil seal, to the energetic sales campaign of H. Piper & Co. The firm was shipping its product to the United States by the late 1830s. By the 1860s, of two million bottles of champagne exported annually to America, 480,000 were sent by H. Piper & Co.[111]

The business was founded in 1785 by Florenz-Louis Heidsieck, a native of Westphalia, who married the daughter of a wool merchant in Rheims and established his own wool and wine trade there. Heidsieck prospered as a champagne manufacturer, abandoned his interests in wool, and eventually took four of his German nephews into the firm. Three were still working with Florenz-Louis when he died in 1828. The nephews operated Heidsieck & Co. together until 1834, at which time one went into banking and the other two established rival champagne companies. Both firms continued to market their wines as Heidsieck; they have since become today's Heidsieck & Co. Monopole and Piper-Heidsieck.[112]

Christian Heidsieck, the nephew directing the business which was to be Piper-Heidsieck, took three men into his firm during 1834: Henri Guillaume Piper, who was a great-nephew of Florenz-Louis Heidsieck and had been working in the cellars of Heidsieck & Co. for several years; Christian Walbaum, a cousin; and J. C. Kunkelmann. When Heidsieck died a year later, his widow decided to continue the business under the name Veuve Heidsieck, with the help of her husband's three assistants. In 1837 she married Henri Piper, and they changed the name of the firm to H. Piper & Co., but continued to market the champagne as Heidsieck.[113]

Meanwhile Walbaum had been sent to Russia to represent the firm, and Kunkelmann, who spoke fluent German, French, and English, had gone to America for the same purpose. Kunkelmann became convinced of the great possibilities of the American market, and decided to remain in New York. His efforts on the firm's behalf were successful in creating a "tremendous vogue" for the product. In 1850 he returned to Rheims a wealthy man and, along with Walbaum, became a partner in the company.[114]

Robert Tomes, who was for two years the American consular agent in Rheims, commented in 1867 on the success of the company's American campaign:

> This enterprising house, being the first of the wine manufacturers to venture in what was then deemed the hazardous trade with America, succeeded, while free from competition, in obtaining such an exclusive and wide circulation for their merchandise, that the word Heidsieck became synonymous with champagne. The latter was deemed superfluous; and some twenty years ago, no one ever thought of saying more, when he called for champagne, than "Give me a bottle of Heidsieck." Great riches have rewarded the enterprise of H. Piper & Co., who are now among the largest and wealthiest manufacturers...[115]

Tomes goes on, however, to describe Piper's Heidsieck as "too sweet for a discriminating palate," although "its traditionary renown still secures for it the largest consumption by the gulping crowd." According to company records, Piper-Heidsieck was the best-selling champagne on the American market for a 30-year period in the latter part of the century.[116]

Christian Walbaum died in 1866, and Henri Piper, after a prolonged illness, followed in 1870. Kunkelmann, who by then was actually running the company, changed its name to Kunkelman et Cie. Upon his death in 1881, his son inherited control. It is noteworthy, however, that even after the 1870 change in title, the firm continued to market its product as Piper-Heidsieck, as it still does today, and at least as late as 1882 the stamp on its corks was "Piper & Co."[117]

The seal and label on a bottle of champagne, as on other wines, were unfortunately not always a guarantee that the bottle's contents were genuine. Newspaper accounts of the 1850s refer to "what was only chemist's stuff baptized with the hallowed name of Heidsick [sic]."[118] And advertisements for this champagne in San Francisco's Mercantile Gazette and Shipping Register, in 1858, included this warning:

> It having come to our knowledge that public sales have been made lately of Piper "Heidsieck" Champagne of very doubtful origin, we take this method of putting dealers and the public in general, on their guard against imitations and counterfeits, and beg leave to state that the GENUINE ARTICLE is IMPORTED by Messrs. JAMES PATRICK & CO.
>
> (Signed)
> Renauld, Francois & Co.
> Sole Agents in the United States[119]

The real champagne of H. Piper & Co., however, was available in America from 1837 on, and would undoubtedly have been shipped to the nouveaux riches of California at the first opportunity. Distribution had definitely been established in San Francisco by 1851. Hopefully, the foil seal from Old Sacramento represents a bottle of genuine Piper's Heidsieck.

Endnotes

1. Alta California Dec. 1, 1849:2; Simonin 1862:7; Lévy 1884:68-69, 111. Bottled claret was advertised early in Sacramento; cf. Sacramento Transcript May 9, 1850:3, May 11, 1850:3.

2. Pilling (1974:8-11, 1975:1-2) discusses a Château Haut Brion shoulder seal recovered from a nineteenth-century site near Carmel, California. Moore (1973:65) notes the recovery at Bent's Old Fort, Colorado, of one seal from St. Julien and one from Pauillac.

3. Penning-Rowsell 1970:13, 78; Roudié 1973:9.

4. Cocks 1846:154; Franck 1868:20-25.

5. Franck 1868:33-40; Penning-Rowsell 1970:13-15, 27.

6. Franck 1868:III-VI; Cocks and Féret 1886:83; cf. production totals for St. Estèphe in Le Producteur Mar., 1838:126-128 and variance in quality at Villenave-D'Ornon in Franck 1868:108.

7. Mercantile Gazette and Prices Current (San Francisco) Jan. 13, 1860:2.

8. Redding (1833:152-153) warns of false labelling and the mixing of different qualities of wine. A prime example of the shipment to America of fraudulently labelled wine is the notation in an 1840 sales list in Le Producteur (Dec., 1840:528) that casks of cheap wine from Sainte-Croix-du-Mont were stamped Haut-Sauternes, and "loaded on the American ship, the Loriel, bound for the United States." References to mercantile fraud appear throughout the four volumes of Le Producteur; two pithy examples are found in July, 1838:329-330 and June, 1840:295-298. For later references to dishonest practices among Bordeaux merchants, cf. Shaw 1863:175-176; Tovey 1877:270-271; Guillaume 1969:183; Penning-Rowsell 1970:81-82.

9. Franck 1853:Table 3, 1868:343-344; Guillaume 1969:185.

10. Guillaume 1969:185; see Note 8, above.

11. Guillaume 1969:184.

12. Le Producteur Mar., 1838:113-114, Dec., 1839:572-573; Penning-Rowsell 1970: 248-254.

13. Stendhal 1970:27-28.

14. Le Producteur June, 1840:296; Penning-Rowsell 1970:13-14.

15. Le Producteur March, 1838:115-116.

16. Penning-Rowsell 1970:76, 78.

17. Mercantile Gazette and Shipping Register (San Francisco) June 17, 1857:1, Jan. 4, 1858:2; Guillaume 1969:183.

18. Jeanette Schulz, Department of Anthropology, University of California, Davis, personal communication.

19. Le Producteur Oct., 1841:439; Aussel 1865:332-345; Penning-Rowsell 1970:78-79.

20. Guillaume 1969:183, 185; Penning-Rowsell 1970:79; Rorabaugh 1976:361.

21. Carosso 1951:109-110; Forbes 1967:167, 236-242; Penning-Rowsell 1970:16-18. There is a vast literature on what Cipolla (1975:296) refers to as "a preposterous insect," its ravages, and the ensuing replanting. We are grateful to Dr. Vernon Singleton, Department of Viticulture and Enology, University of California, Davis, for clarification of the phylloxera problem and for the suggestion that the pest may have first reached Europe on specimens of American vines brought back by botanical collectors.

22. Penning-Rowsell 1970:18; Cipolla 1975:295-297.

23. Hilgard 1884:2-3; Maitland 1888:603; Napa Register Oct. 4, 1889:2; Pacific Wine and Spirit Review Mar. 22, 1890:26, Mar. 30, 1891:11; Carosso 1951:99-101; Leggett n.d.:103-104.

24. Cf. Carosso 1951:99-101. Articles stressing the need for the careful production of fine wines appear in California newspapers and trade journals throughout the 1880s and 1890s.

25. New York Times Dec. 19, 1974:1, 15; Faith 1978:252-291.

26. Noël Hume 1961:98; Munsey 1970:59.

27. Le Producteur Nov., 1840:481; Franck 1868:106.

28. Cocks and Féret 1886:260, 1898:302, 1949:327.

29. Le Producteur Nov., 1840:511-513; Franck 1868:105-106.

30. Mercantile Gazette and Prices Current May 4, 1859:4; Aussel 1865:336.

31. Le Producteur Feb., 1839:93, Feb., 1839:49, 72-75.

32. Le Producteur Feb., 1839:75-76, Nov., 1840:527.

33. Le Producteur June, 1840:278; Franck 1845:61.

34. Franck 1853:80; Malvezin and Féret 1876:68.

35. Le Producteur Feb., 1839:72, 74-75; Franck 1868:74; Cocks and Féret 1886:111.

36. Cocks and Féret 1969:106, 171.

37. Colville 1856:88; Langley 1859:136; General List of Citizens of the United States, Resident in the City and County of San Francisco and Registered in the Great Register of Said City and County, July 1867, Towne & Bacon, San Francisco; Palmer 1881:470; Napa Weekly Journal, Nov. 20, 1903:1.

38. Mercantile Gazette and Prices Current Nov. 9, 1860:2.

39. Langley 1861:160, 1862:178, 1863:168.

40. Langley 1864:183, 1872:228, 1875:334, 1876:360; Francis, Valentine & Co. 1880:393; Menefee 1873:206; St. Helena Star Sept. 7, 1877:2.

41. St. Helena Star Nov. 17, 1882:2.

42. Menefee 1873:206-207.

43. St. Helena Star Sept. 7, 1877:2; Naglee 1879:66; among many comments on the poor quality of wine from mission grapes are those of Hilgard (1884:2) and Maitland (1888:603).

44. Wine Dealers' Gazette Feb., 1872:4; St. Helena Star Feb. 26, 1876:2.

45. Lewis Publishing Co. 1892:190.

46. Hilgard 1884:1, 2; cf. Leggett n.d.:103-108 and Carosso 1951:94-98.

47. Hilgard 1884:1; St. Helena Star Oct. 7, 1875:3.

48. Wine Dealers' Gazette Oct., 1871:4; Menefee 1873:207; St. Helena Star Sept. 7, 1877:2.

49. Pacific Rural Press Sept. 2, 1876:157; St. Helena Star Sept. 7, 1877:2, Nov. 17, 1882:2.

50. St. Helena Star Sept. 7, 1877:2.

51. St. Helena Star Sept. 7, 1877:2.

52. Naglee 1879:66; St. Helena Star June 20, 1879:3.

53. Hilgard 1884:2; Carosso 1951:98-99, 130-134; Cipolla 1975:298-300.

54. Langley 1878:375; Lewis Publishing Co. 1892:190; Napa Daily Register May 21, 1880:3.

55. Napa Daily Register Aug. 21, 1880:1; St. Helena Star Sept. 10, 1880:1; the house was to be finished by the end of the year, and Groezinger was not listed in the 1881 San Francisco City Directory either alphabetically or under Native Wines.

56. St. Helena Star Sept. 9, 1881:3, Nov. 17, 1882:2; Napa Register Oct. 19, 1883:3.

57. St. Helena Star Nov. 17, 1882:2, Sept. 25, 1883:2; Napa Register Oct. 19, 1883:3.

58. Napa Register Oct. 19, 1883:3.

59. Priber 1893:26.

60. San Francisco Merchant Nov. 16, 1886:35; the depression in the wine industry is documented through these ten years in the Pacific Wine and Spirit Review. For summaries, see Carosso 1951:134-140; Cipolla 1975:300-301.

61. Carosso 1951:109-119; Rossati 1900:301.

62. Merchant and Viticulturist Oct. 22, 1889:11; San Francisco Merchant April 12, 1889:41.

63. Merchant and Viticulturist Oct. 8, 1889:4.

64. Napa Register Oct. 4, 1889:2.

65. Napa Register June 13, 1890:3.

66. Pacific Wine and Spirit Review June 28, 1890:10.

67. Pacific Wine and Spirit Review Oct. 15, 1890:3.

68. Napa Register Jan. 23, 1891:3, April 24, 1891:3.

69. Napa Register Aug. 21, 1891:1; Pacific Wine and Spirit Review Sept. 5, 1891:14; Lewis Publishing Co. 1892:190.

70. Pacific Wine and Spirit Review Feb. 6, 1893:12, Oct. 20, 1893:14.

71. Priber 1893:26.

72. Wilbur 1892:648, 1894:640; Crocker Co. 1896:706, 1898:737, 1903:798; Napa Register Jan 8, 1892:3; Pacific Wine and Spirit Review Oct. 31, 1901:37.

73. Napa Daily Journal March 28, 1897:3, May 16, 1897:3, Nov. 25, 1897:3; Pacific Wine and Spirit Review Oct. 31, 1901:37. George seems to have had a colorful career. In the report of March 28, he was "accused of having deliberately altered a court record without authority to do so." On May 16, more details were given on the charges, with the observation that "Groezinger was formerly a resident of Napa County, and has many friends here who hope he will be able to clear himself of the charge made against him." Apparently, the matter was settled, since George is referred to as a judge in 1901.

On November 25, 1897, the Napa Daily Journal again expressed concern for George:

> George Groezinger, formerly of Napa Valley, but now Justice of the Peace in San Francisco, has consented to officiate at the marriage of a notoriety-seeking and foolish couple who wish the marital knot tied in a den of lions. The event is to take place in San Francisco and it is hoped George will have the good sense to collect a big fee in advance and turn it over to his wife before he enters the cage. There's no telling what a lion may do.

74. Napa Weekly Journal Nov. 20, 1903:1; Pacific Wine and Spirit Review Nov. 30, 1903:55.

75. Le Producteur Aug., 1838:386-387; Prices Current and Shipping List (San Francisco) Jan. 8, 1855:4.

76. Le Producteur Feb., 1840:71-72.

77. Le Producteur Nov., 1838:517, 539-540.

78. Franck 1853:93.

79. Le Producteur Nov., 1838:537.

80. Le Producteur Nov., 1838:538-542.

81. Le Producteur Feb., 1839:84-85, 90.

82. Le Producteur Mar., 1840:135.

83. Franck 1845:77, 1853:93, 1868:88, 1871:88; Aussel 1865:76; D'Armailhacq 1867:554; Malvezin and Féret 1876:90.

84. Cocks and Féret 1929:167, 1969:120, 247.

85. Franck 1868:166; P. Pessonier, Château Lamothe, personal communication.

86. P. Pessonier, Château Lamothe, personal communication.

87. The sixth edition of Franck's guide to the wines of the Gironde appeared in 1868, the year in which Chauché trademarked Château de Larnac. The guide lists only four wineries in the Queyrac township; no comment on their products is given. In 1839, Le Producteur (Sept., 1839:421) had noted five wineries in the area, two of them at Larnac. Cocks and Féret (1886:229, 1898:255) list six wineries in Larnac in 1886 and fourteen in 1898, but all of them are noted in the lowest class described, crus artisans et paysans. For descriptions of wine from the Queyrac area, see: Le Producteur Sept., 1839:418-419; Cocks and Ferét 1886:226.

88. Le Producteur July, 1840:315; Franck 1868:107; Cocks and Féret 1886:289, 1898:330; Pacific Wine and Spirit Review Oct. 21, 1891:10, July 12, 1892:12.

89. Kimball 1850:97; Morgan & Co. 1852:112a; Rivers 1854:117; Daily Alta California Oct. 11, 1862:1; Pacific Wine and Spirit Review Oct. 21, 1891:10.

90. Pacific Wine and Spirit Review Oct. 21, 1891:10; Langley 1860:91; Wilbur 1890:301.

91. Harris, Bogardus & Labatt 1856:35; Langley 1864:102, 1865:117, 1867:128, 1868:137, 1869:148; Pacific Wine and Spirit Review Oct. 21, 1891:10.

92. California State Archives, Trademark Application No. 115, filed Nov. 27, 1868; Wine Dealers' Gazette Dec., 1872:1.

93. Semi-Tropical Livermore 1887:25; Merchant and Viticulturist Oct. 22, 1889; Wilbur 1891:355.

94. Pacific Wine and Spirit Review Mar. 21, 1892:29, Aug. 5, 1892:16, May 6, 1893:12.

95. Paguierre 1828:65-66.

96. Le Producteur Nov., 1841:496; Penning-Rowsell 1970:92-93.

97. Le Producteur Nov., 1841:496; Cocks 1846:152.

98. Franck 1868:107.

99. Schoonmaker 1967:186.

100. Sacramento Transcript Aug. 24, 1850:1; Sacramento Daily Union Sept. 9, 1851:2; Askin 1978a; Bullen 1978:16.

101. Stebbins 1875:81.

102. Franck 1868:115; Penning-Rowsell 1970:108, 136.

103. Translated from Guillaume 1969:183.

104. Petite-Lafitte 1868:Table C; Penning-Rowsell 1970:97.

105. Franck 1868:115.

106. Translated from D'Armailhacq 1855:166-167. Ferrier (1857:131-132) at about the same time presented a strong case for stoppering wine bottles with glass, recommending the hermetic seal for matured wines. A disadvantage of the stoppers, as Ferrier perceived, can be attributed to the state of glass technology in Bordeaux at the time: each stopper matched a particular bottle; they were not easily interchangeable.

107. Translated from D'Armailhacq 1855:167-168.

108. Switzer 1974:23-24.

109. Switzer 1974:Fig. 30.

110. Vizetelly 1882:167.

111. Tomes 1867:59-60,64; Forbes 1967:447; Piper Heidsieck Co., personal communication.

112. Forbes 1967:445-446.

113. Forbes 1967:446-447.

114. Forbes 1967:447.

115. Tomes 1867:64.

116. Tomes 1867:64-65; Piper Heidsieck Co., personal communication.

117. Forbes 1967:447; Vizetelly 1882:Appendix.

118. Harper's Weekly April 18, 1857:241.

119. Mercantile Gazette and Shipping Register July 19, 1858:3.

SODA AND MINERAL WATER BOTTLES

In the last century, natural mineral waters (that is, water derived from natural springs and containing, or reputedly containing, unusually high concentrations of various minerals) were consumed in large quantities in the United States and in Europe. Most of this consumption was inspired by the medicinal effects attributed to the waters -- an attribution of considerable antiquity in Europe and one based on the undoubted stomachic effects of many of them. Additionally, consumption of such waters was promoted by the temperance movement simply as an alternative to alcoholic beverages. They were also used in quantity by bartenders in the preparation of mixed drinks.

Still, in an era of medical innocence, it was the therapeutic potential of the waters which formed the real basis of their public appeal. As noted by a recent historian of this phenomenon:

> Nearly any spring could become a mineral spring; it had no clear definition. Fantastic claims were made for waters from Equinox, Middletown, Saratoga, Poland, Stafford, Clarendon, Highgate, and innumerable others. European resorts such as Baden-Baden, Harrogate, and Bath promised miraculous cures for their clientele; and in the United States, Warm Springs, Georgia, and White Sulphur Springs, Virginia, made the same promises. Yet no medical evidence supports the conclusion that drinking the water from any spring would bring the miraculous cures promised. At Middletown Springs [Vermont] several openings were unearthed and numbered appropriately. The Middletown Hotel Springs Company prescribed drinking the water from drink No. 3, followed by No. 2 to cure asthma, and drinking and washing with No. 1 to find relief from piles. For dyspepsia the Hotel recommended a drink from No. 3 or 2, followed by No. 1, and for diarrhea they suggested the patient drink No. 1, and if the patient was chronic and feeble, to try No. 2.
>
> Despite the dearth of medical evidence, chemical analyses abounded, as did the statements from cured patients who extolled the virtues of this or that establishment. Most chemical analyses of the water demonstrated about the same characteristics, except those for the most successful springs, which frequently had a high sulphur content and emitted the most vile smelling, tasting, or appearing water.[1]

Nevertheless, the waters of the major springs were divided into several classes, based on the relative strength of various chemical constituents, and different therapeutic effects were ascribed to them accordingly.

> Mineral springs are variously classified; the best classification for medical purposes is the chemical, which specifies a spring-water as belonging to a class indicated by the ingredient which is most abundant or most active, as alkaline, saline, sulphur, chalybeate, calcic, sulphated, and simply thermal. Many springs produce waters which possess the properties of two of these classes, and are termed accordingly, alkaline-chalybeate, saline-sulphur, thermal-calcic, and so on.

Alkaline. -- The waters of this class are rich in alkaline carbonates, the chief of which is the carbonate of soda; they usually contain a quantity of carbonic-acid gas. The use of the alkaline waters is generally considered by the medical profession to be indicated in catarrhal affections of the respiratory, digestive and genito-urinary organs; in uric acid, diathesis; malarial cachexia; and diabetes mellitus...

Saline. -- The chlorides are the chief constituents of these waters, the chloride of sodium predominating; traces of iodine and bromine are sometimes found. The saline waters are considered to be valuable in the treatment of scrofula, syphilis, chronic gout, hepatic disorders, malarial cachexia and cutaneous and catarrhal affections. The famous Saratoga Springs of New York belong to this class...

Sulphur. -- In these waters the sulphur is in the form of sulphurets, the most prevalent and active being the sulphuret of hydrogen; this gas imparts its peculiar odor and taste to the water. Sulphur waters have been found particularly useful in correcting bad habits of the body, arising from chronic poisoning, as from metals, or specific animal poisons. They are also employed in treating chronic engorgement of the liver and its accompanying symptoms, catarrhal affections of the respiratory tract and diseases of the skin...

Chalybeate. -- In these waters the chief or most active ingredient is iron; many of them are highly charged acid gas which renders them more palatable and efficacious. The ferruginous waters are particularly indicated where there is a deficiency in the red elements of the blood, in cases of anaemia, chlorosis and reduced states of the system...

Calcic. -- In these waters the salts of lime form the most important ingredients. They occur most frequently as the sulphate (gypsum) or the carbonate (limestone). The waters of these springs are useful in the treatment of dyspepsia and chronic cystitis with tendency to the formation of stone or gravel. Such of these waters as contain an abundance of the alkaline carbonates have proved of value in treating diabetes mellitus...

Sulphated. -- In these waters the sulphates predominate; the sulphate of sodium (Glauber Salt) or the sulphate of magnesium (Epsom Salt) impart the bitter taste and purgative properties which characterize the waters...

Thermal. -- The value of this class of waters, depends more upon their temperature, which ranges from 85° Fahrenheit upward, than upon the presence of any particular chemical agent, although they may in that respect come under the several classifications above considered. They are employed, as a rule, in the form of baths...[2]

Although this basic system of classification was in common use, the therapeutic roles assigned to the various categories of mineral water varied among different observers. One other summary should suffice to make the point:

Waters of the ALKALINE class -- known also as carbonated or acidulous waters -- have been chiefly advised in certain affections of the stomach and intestines, catarrhal in character, in bronchial catarrh uncomplicated by cardiac disease, in gout, for the relief of which they have attained celebrity, in chronic rheumatism, in functional disturbances and engorgement of the liver, in catarrh of the bladder, in diabetes mellitus, and in dropsy. They are advised in the dyspepsia attended with excessive acidity of the secretions, "with sour or rancid eructations and regurgitations," and flatulent distention of the abdomen.
Pure alkaline waters are seldom purgative, but, being usually associated with the salines, they may become so. They are often more properly alkalo-salines. They are commonly decidedly diuretic, and correct an acid condition of the urinary secretion. Hence, probably, their utility in rheumatism. For the chronic forms of this disease they are used internally or in warm baths, and are of decided efficacy.
The SALINE waters are aperient, diuretic, and excitant to the liver and its secretions, and to other members of the glandular system. They are, as above remarked, commonly associated with one of the other classes, and hence their medicinal effect will be accordingly modified. Many of them are thermal. They are used both internally and for bathing, and have been found efficient in various cutaneous diseases; in scrofula, and in gout and rheumatism. They have also been employed successfully in diabetes, and Bright's disease; in calculous concretions of the gall-duct, and in uterine engorgements.

Both of the above classes of mineral springs are frequently associated with iron in greater or less proportion, and hence are called CHALYBEATE waters whenever the iron is in sufficient quantity to become prominent. Chalybeate waters possess in a high degree the virtues of the ferruginous preparations, being in a form acceptable to the stomach, and which is readily introduced into the blood, improving its quality and effecting the gradual removal of those states of the system known as chlorosis and anaemia. They are of great benefit in disturbance of the functions of the uterus...

SULPHUROUS WATERS. The medicinal effects of these waters depend mainly upon the combination of sulphuretted hydrogen with the ingredients already described as composing the saline, alkaline, and chalybeate waters. They...exert a sedative action peculiar to themselves, more or less marked according to the quantity of the sulphuretted hydrogen they contain. To the same substance is due, in part, their diuretic action. They have attained considerable reputation in chronic skin diseases, and in scrofula. For their curative virtue in chronic rheumatism they have very justly gained a great notoriety, but in such cases their efficacy seems to depend more upon their external use... In paralysis without organic lesion they are of service, while in the same disease attended with cerebral or spinal apoplexy, they are regarded to be injurious... In engorgement of the liver, abdominal plethora, and hemorrhoids, the saline-sulphur waters have long been justly esteemed as trustworthy remedies...

> According to Dr. Thompson they are injurious to those laboring under general plethora; or [who] are affected with inflammatory fever.
>
> In lead-poisoning they constitute a very valuable remedy, effectually eliminating the poison from the system.[3]

The commercial production of artifically carbonated water, which will be referred to here as soda water,[4] was first undertaken in England in the latter half of the eighteenth century. The practice quickly spread to Europe, and by 1807, artificial soda water was being manufactured and sold in America. The appeal of this new product was originally identical to that of mineral water; most of the early interest in manufacturing soda water centered on its therapeutic potential. Indeed, soda water had advantages in this regard; if the effective constituents of a spring could be isolated, they could be artifically concentrated, or be combined in the absence of other objectionable constituents. Also, it was difficult to keep bottled mineral water for extended periods without loss of carbonation or the settling out of some constituents -- a fact which, in an era of slow transportation, certainly boosted the appeal of the manufactured beverages.[5]

As the manufacture and consumption of soda waters increased, however, their therapeutic appeal declined. There seem to be several reasons for this. First, there was little difference in the machinery and processes used by different manufacturers, and the product of an individual manufacturer was not perceived as unique or extraordinary. Second, the necessary equipment was sufficiently inexpensive and the required technical knowledge simple enough that manufacture could be undertaken in any locality. Third, the small amount of capital needed to enter the business, plus the limitations of mid-nineteenth-century glass technology in producing bottles capable of long-term storage of effervescent water, meant that the market of most manufacturers was limited. Consequently, the size of these businesses was also limited, and this in turn would have discouraged large-scale advertising, while the propinquity of the clientele would have made claims of outstanding cures relatively easy to investigate.

On the other hand, the ready availability and relative cheapness of soda water and the fact that manufacturers generally declined to reproduce the mephitic aroma of mineral waters, made it, when "an agreeable pungent taste [and] an exhilarating quality" were all that were required, quite acceptable. Its therapeutic applications were generally limited to dyspepsia, constipation, or at most, use as "a pleasant and grateful beverage" in "many cases of fever and thirst." It thus competed successfully with mineral water as a temperance drink and, alternately, as a mixer for spirits. It was also soon used in the preparation of lemonade and other flavored drinks, a practice which eventually culminated in the modern carbonated beverage industry.[6]

In the last century, however, the industry, though in aggregate large, operated on a more moderate scale than it does today. California in 1880 may be taken as representative:

> Soda Water. -- This industry includes, besides the particular beverage which gives it its name, the various drinks flavored with lemon, sarsaparilla, ginger, etc., as well as bottled cider and artificial mineral water.
>
> The annual consumption on the coast is about 10,000,000 bottles, containing a pint each, amounting in value to $330,000.

> Requiring no extensive buildings (a tent has been used), nor very elaborate machinery, the manufacture has been co-existent with the miner's camp, and the production only limited by the demand, though it is doubtful, considering the high prices of the days of mining excitement and the present competition, if the business of to-day has become lucrative in proportion to the increase of population. Works are now established throughout the coast in almost every hamlet. The materials used in this manufacture consist chiefly of marble (in powder), sulphuric acid, and the different flavoring extracts. The acid is of Californian and Nevada production; the other articles come from the Eastern States, or have until recently, since when one manufacturer, at least, has made his own extracts. Raw material is consumed to the annual value of about $100,000, the number of hands employed is 160, and capital amounting to $300,000 is invested.[7]

The soda and mineral water containers in the Old Sacramento collection include both ceramic and glass vessels, and these will be considered separately.

Ceramic Containers

The ceramic mineral water containers in the collection are quite consistent in shape and manufacturing technique and somewhat less so in size. They are straight-sided, circular stoneware jugs which measure 10-1/2 to 12 in high, with a diameter of slightly less than 3-1/2 in, and which held 28 to 40 oz of water. They are wheel-thrown, jigger-made vessels, and the bases usually exhibit a series of concentric looped ridges left by the wire used to cut the clay base off the wheel. The exterior surface is salt-glazed. The necks are quite short and bear a series of encircling embossed ridges intended to help secure the wire for the cork. Each jug has a single applied handle which loops from just below the base of the neck to the base of the shoulder.

These jugs, which sometimes held gin and various liqueurs, were being used for German mineral waters by 1827. They were manufactured in the Nassau District in western Germany at Hohr, Grenzhausen, and other towns. During the seventeenth century the potteries of this region had produced high-quality stoneware, but during the nineteenth century the demand for mass-produced ware greatly affected the industry. Demand shifted to mineral water jugs, beer mugs, water pitchers, and sewer pipes; by 1870, the district was producing more than 40,000,000 lb of these items annually. These wares were manufactured until the second decade of the present century, but the interruption of export in mineral waters by World War I and the transference of the work force into more militarily important activities led to the effectual end of the industry. Since the war, German mineral waters have generally been bottled in glass.[8]

Four companies or springs are represented by the stoneware jugs in the collection, all identified from names stamped in the clay near the shoulder.

Birresborn in der Eifel

These containers, labeled "MINERAL BRUNNEN/BIRRESBORN/IN DER EIFEL," represent the mineral waters of Birresborn, located in the district of Trier in western Germany. We have nine specimens (Fig. 29a, b).

The waters of Birresborn have had a therapeutic reputation since the first century. They were bottled in jugs of the present type by 1827, but records of exports to the United States or of the history of the waters and their promoters were destroyed during World War II. Our only local record of the product is an early twentieth-century ad listing "Birresborner Mineral Brunnen Table Water" among the products handled by William Wolff & Co. of San Francisco; the archeological data however indicate that the product was available in Sacramento by the 1880s.

The waters of the springs at Birresbörn are today marketed under the brand names Birresbörner Phonix Sprudel and Birresbörn Adonis Quelle.[9]

Herzogthum Nassau

Two jugs bear the label "HERZOGTHUM NASSAU" beneath a circle containing a rampant lion surrounded by the word "SELTERS." We have no information on these containers.

Niederselters

A single fragment impressed "...RUNNEN-VERWALTUNG" is all that is available to represent a jug originally labeled "NIEDERSELTERS NASSAU" in a circle around an eagle design, below which was "KÖNIGLICH PREUSISCHE BRUNNEN-VERWALTUNG" (Royal Prussian Mineral Spring Administration).[10]

Figure 29. German mineral water containers: a) Birresborn jug; b) Birresborn stamp; c) Selters Nassau stamp.

The Niederselters spring, located in the Nassau district of the Prussian provence of Hesse, provided an early export water. By the 1760s, it was being shipped to England, where it was prescribed "in many cases, as for scurvies, spasmodic affections, and in consumption; in the last case, mixing it with asses' milk."[11]

How early it was exported to America we do not know. It was certainly available here, sold in stoneware jugs, by 1886, and continued to be available, retailing at 25¢ to 30¢ per jug, until the beginning of World War I.[12]

Selters, Nassau

The common containers are impressed "SELTERS/NASSAU" in a circle around a German eagle which bears on its chest a shield with the initials "F.R." (Fig. 29c). We have 55 of these jugs.

From another spring in the Nassau district, this water too was exported early to England. According to an account of 1819, the water

> which is imported at London is brought over in stone bottles, closely corked and cemented containing about three English pints each, which means the water, as long as the common air is excluded, will retain many of its excellent qualities for several months; but this caution is so necessary, that if too large an empty space is left even in the neck of the bottle, it soon loses in a great degree the brisk, smart, pungent taste, which principally characterized its excellence, and is more liable to be injured by keeping then any other mineral water.
>
> The water abounds with an alkaline salt in a much greater quantity than any of the other known mineral waters.[13]

Selters water was being exported to America by 1846. American trade catalogs were often quite casual about distinguishing the different Selters waters, but this one seems to have retailed for 15¢ to 25¢ per jug in the last century and, like other German and Austrian mineral waters, undoubtedly disappeared from the American market during World War I.[14]

Glass Containers

Glass bottles for soda and mineral waters, unlike the ceramic containers, have evolved into a myriad of varying shapes. This process was well underway in the nineteenth century, but the bottles in use then can be roughly categorized into several styles.

The earliest glass bottles specifically intended for mineral waters were perhaps the spherical-bodied and narrow-necked bottles in use in the Netherlands and adjacent regions in the seventeenth and eighteenth centuries.[15] These seem to have had little influence on later developments, however. At the beginning of the nineteenth century, British soda and mineral waters were bottled in crude straight-sided bottles with marked shoulders and relatively long necks.[16] These vessels were presumably the models for a style of bottle developed in upstate New York and used to hold mineral waters from the Saratoga district. These bottles are made of dark green glass in various shades, have straight sides, marked shoulders, short necks, and sloping-collar finishes (Fig. 30a).

Figure 30. Soda and mineral water bottles of various styles: a) Saratoga style (Clarke & White); b) Patent style (E.L. Billings — note glass rod from Matthews stopper inside bottle); c) Semi-round base style (Hires Root Beer); d) Modern style (C. Schnerr).

Most American soda bottles were of quite a different style. These bottles, made in what will be termed here the standard style, are of heavy glass, usually in various shades of blue or green. They too are straight-sided, but the shoulders are less pronounced, the necks are longer and narrower, and they usually have a blob-top finish (Fig. 31).

Bottles of the standard form, which were made from the first half of the last century until the beginning of the present one, were clearly the models for a modified form, the modern style, which was introduced about the turn of the century. Vessels of the latter style, which have less pronounced shoulders and combine the shoulder and neck into a continuous unit, seem to have come into use with the crown finish (Fig. 30d). They also came into popularity at the same time as the use of clear glass for soda bottles, and they are ordinarily of this material.

Meanwhile, another style had come into common use in the United States in the 1870s. Bottles of this type, which we refer to as the patent style, are straight-sided and have pronounced shoulders and virtually no neck (Fig. 30b). They generally have blob-top finishes, though these are usually modified in being made with a lipping tool. Patent style bottles normally are made of pale (transparent or nearly transparent) green or aqua glass. The style probably developed in connection with the many experiments being conducted in the last half of the century in the attempt to provide better bottle closures. Having the outsweep of the shoulder just below the finish provided a more definite anchorage for many types of internal stoppers than would a gradually expanding neck. It is noteworthy that in several cases patent style bottles in the collection retain either Hutchinson or Matthews stoppers.[17]

a b c d

Figure 31. Standard style soda and mineral water bottles: a) Typical dark glass bottle (Martin Rancich); b) Transparent glass bottle (Caduc, Napa Soda); c) Bottle with blank slug plate label; d) Octagonal bottle (S.S. Knickerbocker).

In Great Britain, meanwhile, other styles of bottles were in vogue. Some of these were exported to the United States, and a few American manufacturers were sufficiently impressed to imitate them. The most striking feature of these containers was the absence of a flat base. One of the difficulties in bottling soda water at the beginning of the last century was that unless an extremely tight seal could be maintained between the cork and the bottle, gas escaped and the water lost its effervescence. This problem was solved in 1814 by William Hamilton, who in that year invented a bottle with an elongated egg-shaped body, which could not stand upright. Since the bottle had to be stored on its side, the cork was kept moist, thus eliminating the shrinkage in drying which allowed the escape of the gas. Bottles of the Hamilton, or torpedo, style have bluntly pointed "bases," rounded sides, and relatively long necks (Fig. 38). They are usually of pale green glass and have either blob-top, sloping-collar, or annular finishes. Only a few are present in the collection, and all are imports from the British Empire.

Another style, which is a modification of the torpedo style, is here termed the round base style. Bottles of this type are straight-sided and have short necks. The bases are hemispherical rather than bluntly pointed. In some cases (which we categorize as semi-round base bottles) the center of the base is indented so that the bottle can stand upright, though not with much security (Fig. 30c). Most of these bottles are of pale green or aqua glass, and they may have blob-top, sloping-collar, or crown finishes. The collection has few specimens and these are probably equally divided among British and American firms.

Bottles of a few types other than those described above are present, but at least in terms of the present collection they are unique to individual companies, and so will be described under those headings.

The soda and mineral water bottles in the Old Sacramento collection include embossed specimens from at least 62 firms. Because of time constraints only 52 of these could be included in the present report; the others are planned for inclusion in a future volume.

Babb & Co., San Francisco

Only a single broken bottle is available from this company: a wall fragment of aqua glass from a standard style bottle, embossed "[BAB]B & CO./[SAN F]RANCISCO/[C]AL." The vessel was apparently blown in a two-piece mold, but neither the finish nor the base is preserved.[18]

The company was founded by Jeffries Babb, who began making soda water at 384 Stockton Street in 1852. The firm was still in operation (at the rear of 280 Dupont Street) in 1854, but is not listed thereafter.[19]

John S. Baker

The lone 10-oz container from this soda works is unusual in being octagonal, but is otherwise of standard shape. It is of blue green glass, made in a two-piece mold, with an improved pontil mark covered with white paint. The bottle is embossed vertically "JOHN S. BAKER//MINERAL WATERS//THIS BOTTLE/IS NEVER SOLD." The traces of an earlier label, which has been slugged out of the mold, are still discernible, and the designation "J. BOARDMAN & CO." can still be read. J. Boardman & Co. bottled soda and mineral waters in New York from 1846-1856.[20]

We have been unable to locate a soda water bottler named John S. Baker, however, in either California or New York.

M. M. Batelle

Another isolated specimen, this bottle is a fragmentary teal green bottle of standard style, blown in a two-piece mold. The base exhibits a bare-iron pontil mark, painted over in white and then in red. The finish is missing, but was doubtless a blob top. The embossing "M. M. BATTE[LLE]" in large letters encircles the bottle, while below it is "[BR]OOKLYN/N.Y.//THIS [BOTTLE IS]/NEV[ER SOLD]/U[NION GLASS WORKS]."[21]

Michael M. Battelle was first listed in the Brooklyn directory for the year 1853 as a dealer in mineral water. From 1854 until 1856, he was also listed as operating a "bottling store." After 1856, Battelle apparently left the soda bottling business, and entries for the next eight years designate him variously as a cigar maker, salesman, agent, collector, and clerk. In 1864, he disappeared from the listings.[22]

It should be noted that Battelle had a contemporary in the New York mineral water sales and bottling business whose name was Monroe L. Battell. The latter was active for the better part of the decade from 1850 until 1860; from 1853 on, his firm was known as Battell and Taylor.[23]

Charles Belding

The only bottle from this Stockton soda manufacturer was an aqua 8-oz standard style container. Made in a two-piece mold, it is embossed with a large "B" (Fig. 40b). The finish is missing, but it was undoubtedly a blob top.

Belding was a prominent Stockton businessman who operated his soda works alone from 1870 to 1895. The company is discussed more fully under Lippincott & Belding.

Belfast Soda Water & Ginger Ale Co.

Only one bottle is present in the collection from this company. Made in a two-piece mold with a blob top, this 10-oz vessel has a patent style body with an elongated neck. The glass is teal green, and the embossing, arranged vertically, reads "THE BELFAST/SODA WATER &/GINGER ALE CO.//SAN FRANCISCO//CAL." (Fig. 32a).

This embossing was trademarked in 1897 by Diedrick and Frederick Steimke of San Francisco, who, as Steimke Bros., were the proprietors of the Belfast Soda Water and Ginger Ale Co. According to the trademark application, they were then "manufacturing, bottling, and selling soda waters, mineral and aerated waters, cider and other beverages."[24]

Belfast Ginger Ale had been made in San Francisco since at least 1878, when it was listed as a product of both the Pacific Mineral Water Co. (A. J. Chambers and T. J. Pyne) and of the Belfast Ginger Ale Co. (Frank S. Waldo). Both firms continued to operate for many years.[25] Steimke & Co. were in business in 1888, as agents for the brand, and continued in operation at least until 1915. The Steimkes first appeared in San Francisco in 1873, when John Steimke worked as a clerk for the grocery firm of Bruns & Co. at the northwest corner of Eddy and Price streets. The following year, John was still a clerk, but Frederick was a partner in the firm, which was styled Bruns & Steimke. A year later Frederick had apparently bought out Bruns, and in 1877 Frederick Steimke & Bro. (John), grocers and liquor merchants, were first listed. In 1881 the company moved to 2768 Octavia Street, and in 1884 Richard Steimke replaced John in the partnership.[26]

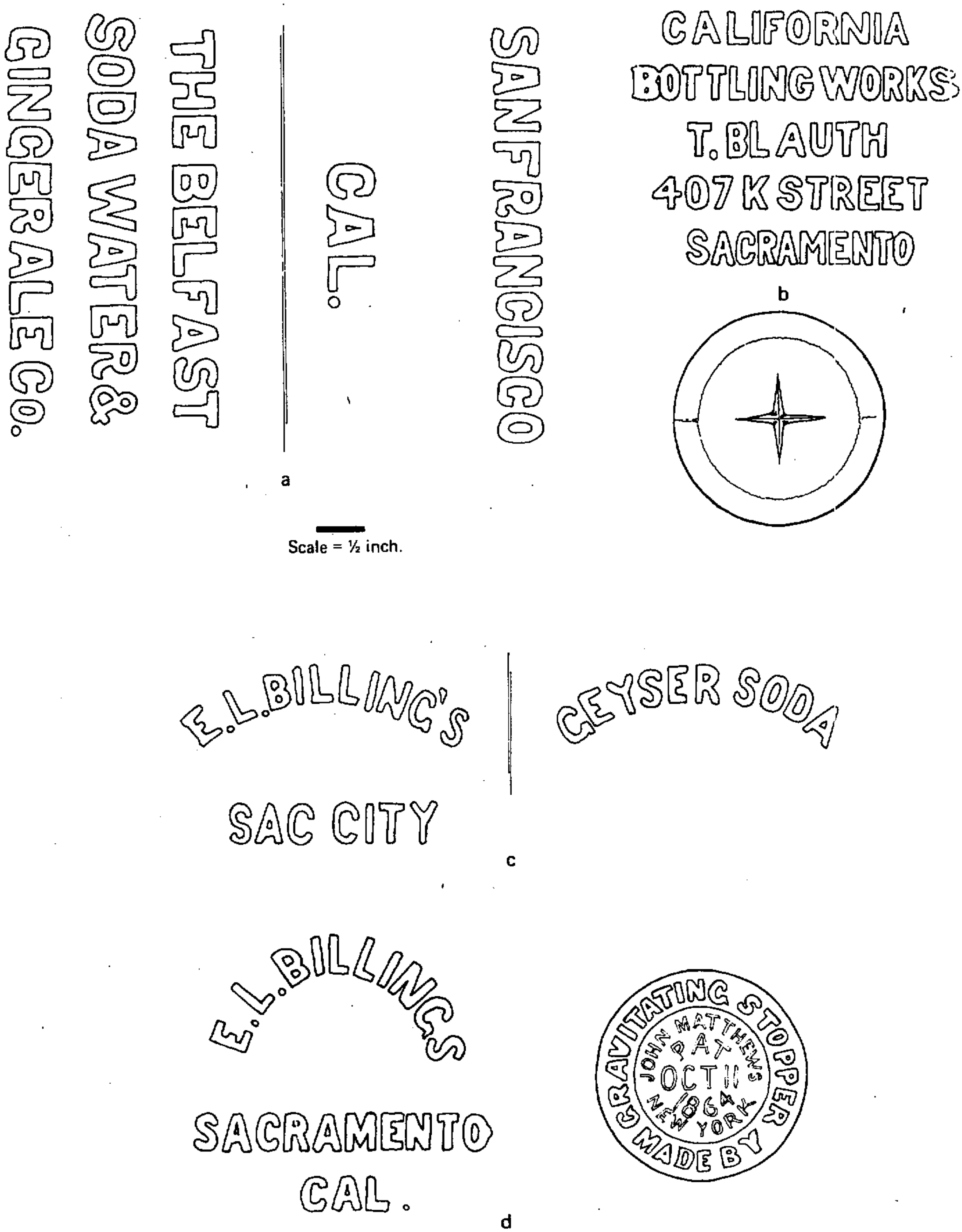


Figure 32. Embossed soda and mineral water labels: a) Belfast Soda; b) T. Blauth; c-d) E.L. Billings.

In 1888, Steimke Bros. (Frederick and Richard) are listed as proprietors of the Belfast Ginger Ale Co. at 2768 Octavia Street. In 1893, Diedrich Steimke replaced Richard as a member of the firm, and in 1895, yet another Steimke, Israel, is included as a member for a single year. Frederick continued with the company until 1897, and Diedrich until at least 1915.[27]

E. L. Billings

From this Sacramento soda water distributor we have two distinct types of bottles -- both common -- which may represent either a chronological sequence, or two kinds of water. The less abundant variety -- and presumably the older -- is a standard style 8-oz or 9-oz bottle of deep aqua glass made in a two-piece mold. It has a blob-top finish and is embossed "E. L. BILLINGS/SAC CITY//GEYSER SODA" (Fig. 32c). Twenty-four of these have been recovered.

The second form is a patent style bottle of pale aqua glass, also with a blob-top finish and from a two-piece mold, but embossed "E. L. BILLINGS/SACRAMENTO/CAL." The base is embossed "GRAVITATING STOPPER/MADE BY/JOHN MATTHEWS/NEW YORK/PAT/ OCT 11/1864" (Fig. 30b). At least one of the 25 specimens included a Matthews stopper (Fig. 32d).

Ephraim L. Billings, originally from Vermont, arrived in Sacramento shortly after the town was established. In 1852, at the age of 24, Billings was listed in the California census as a cook. Within the next twelve months he had formed a partnership with V. M. Sawyer, and they had established themselves on Front Street as liquor merchants. In 1854, Sawyer left the firm, and Billings entered into a period of short-lived partnerships over the next five years.[28] In 1859, Billings apparently moved to Folsom, California, where he formed a partnership with William Timson. Timson & Billings were "wholesale dealers in fine wines, liquors and cigars, California Port Wine, agent for Hunters California Wheat Whiskey, pure cognac, brandies and Rochelle Brandy."[29]

In 1865 or 1866, Billings moved back to Sacramento and opened a soda factory known as the Union Soda Works at 49 Front Street. This operation moved, in 1868, to 105 and 107 K Street, where Billings was listed as a liquor merchant as well as the operator of a soda factory. He was to remain at this site throughout the remainder of his years in business. In 1870, he trademarked the name Sparkling Mead for one of his products, but whether this was soda water or an alcoholic beverage is uncertain.[30]

In 1873, E. L. Billings & Co. were listed in the directories as "importers and wholesale dealers in fine brandies, wines and liquors, and agents for Geyser Soda." While this was the first notice that Billings was dealing in Geyser Soda Water, the 1870 census had given some indication of the size of his soda water operation by that time. Billings had one soda machine and employed four males over 16 years of age, producing 25,000 doz bottles of soda per year, which were worth $12,500. He was credited with an investment of $4,000 in the operation, and other expenses were listed as:

Total Annual Wages	$3600
Bbls Marble Dust	150
Accids sic	300
Soda Corks	800
Soda Bottles	2200
Other Expenses	3000

A decade later, the importance of Billings' soda water business had apparently decreased, as in the 1880 census the total product value was only $7,000 and the value of material $2,776. It may be noteworthy that a survey of the Industries of the Pacific Coast, about this time, lists E.L. Billings & Co. among liquor wholesalers, but not among soda bottlers.[31]

Around 1874, Billings apparently took James Woodburn as a partner in the operation, and Woodburn continued to be associated with the firm until its demise in 1884. During the final five years, the soda water establishment may have bottled Lytton Springs Seltzer Water instead of Geyser Soda, although possibly the firm dealt in both. Billings apparently died in 1883, and the firm was not continued either by his son, Lewis, or by Woodburn.[32]

Theobald Blauth, California Bottling Works

Only one bottle from this firm has been found: a patent style ca. 8-oz vessel of pale green glass, made in a four-piece mold. It has a blob-top finish and a rusted Hutchinson stopper still in place. The body is embossed "CALIFORNIA/BOTTLING WORKS /T.BLAUTH/407 K STREET/SACRAMENTO." The base bears an embossed four-pointed star (Fig. 32b).

Theobald Blauth arrived in Sacramento in 1881 or 1882 and quickly established himself as proprietor of a saloon at 1021 Fourth Street. By 1885, he had moved to 407 K Street, where he became proprietor of the Vienna Beer Hall. Blauth apparently engaged in several operations from the K Street address. In 1889, he was listed as a bottler, and in 1891, he became the agent for John Wieland Brewing Co., as well as continuing his proprietorship of the Vienna Saloon. The California Bottling Works first appears as a name for his bottling operation in 1891, when he trademarked his embossed label, noting that the same embossing was used on quart bottles for beer and on pint bottles for soda water.[33]

In 1892, the Sacramento directory listed Theodore [sic] Blauth as "proprietor California Bottling Works and sole agent John Wieland's Lager Beer."[34] About this time, Blauth seems to have become primarily a liquor wholesaler and bottler, disassociating himself from the retail trade. In 1896, Blauth's son Charles also appeared in the directories and, by 1901, had become a "commercial traveler" for his father's firm, apparently selling the Blauth products to retail outlets. In 1904, there were two "Theo Blauth" listings -- one dealt in liquors, and the other was a hop grower on Freeport Road. Whether both refer to the elder Theobald or one possibly to his son is unclear, but in any event it appears that Blauth beer could truly be called locally produced.[35]

In 1906, Theo H. Blauth was president of T. Blauth Sons Co., Charles was the vice-president, and Julius Blauth was the firm's manager. Theo (listed as Theodore) Blauth and his sons continued to wholesale liquors until Theo's death in 1918, when Julius took over the management of his estate. In 1920, with the advent of Prohibition, Julius Blauth was described as a soft-drink dealer. In 1922, Julius' listing contained only a reference to an "office" at 407 K Street; by 1926, he was listed as a farmer, and four years later as a rancher, at 3070 Freeport Road.[36]

Bolen & Byrne

A single broken specimen from an Atlantic Coast bottler, this fragment of clear glass is apparently from a standard style bottle made in a two-piece mold, and is embossed "BOLEN [& BYRNE]/E[AST 54TH ST/NEW YORK]." A complete specimen illustrated by Schmeiser is also embossed on the reverse side "THIS BOTTLE/NOT TO BE SOLD."[37]

Owen Byrne was making soda water in New York by 1860, and by 1870 Bolen & Byrne were in business at 169 Broadway. The firm had an address on East 54th Street, as shown on the embossing, from 1879 until at least 1899.[38]

Boley & Co.

Only two fragmentary bottles of cobalt blue glass represent this pioneer Sacramento enterprise. The bottles are of standard style from a two-piece mold, and were made with a bare-iron pontil. They have a slug plate label embossed "[BOL]EY & [C^{O}]/SA^{C} CITY C[A^{L}]."[39]

Addison and Lafayette Boley established Sacramento's first soda water factory in 1849. They apparently had come to California from New York, and by 1852, several other members of their family had arrived, including Lafayette's wife.[40] We know little about the company in its early years, but when Sacramento flooded in January 1853, and most of its merchants moved across the river to the tent city of Hoboken, the firm rose to the occasion, advertising,

> SODA! SODA! Boley & Barnard manufacturers of soda water Front street opposite the Slough, Sacramento City for the accommodation of the citizens of Hoboken we will from this date make regular shipments of soda water consigned to H. J. Bidleman of the Magnolia Saloon on Main Street opposite the Steamboat Landing.[41]

A business crisis seems to be indicated by an advertisement which appeared in December of the same year, and continued into the spring of 1854:

> To SODA WATER manufacturers: ATTENTION! The firm known as BOLEY & CO. of Sacramento City, offers for sale their entire stock and trade, consisting of the finest machinery and best selected materials ever imported in California. Gentlemen who wish to embark in the soda business will do well to call, or address Messrs. Adams & Co.[42]

Nonetheless, the company continued in operation. Although Lafayette Boley was no longer associated with the firm after 1855, A. G. Boley continued to operate the soda water factory on Front Street until 1861 or 1862. The 1860 census showed that Boley's Soda Works annually produced $30,000 worth of soda water and used approximately $5,000 in bottles and $8,000 in "sugar acids," with an average monthly labor cost of $450 paid to five male employees. The Boleys were no longer listed in Sacramento after 1862.[43]

W. H. Burt

Another lone specimen, this is a 10-oz emerald green bottle of standard form, made, as usual, in a two-piece mold and with a blob-top finish. It is embossed "W. H. BURT/SAN FRANCISCO" (Fig. 33a), and the base exhibits an improved pontil scar covered with yellow paint.

A mariner named William H. Burt lived in San Francisco from 1861 to 1864, but we have found no references to his connection with the soda water industry.[44]

Phil Caduc, Napa Soda

These 9-oz bottles are of standard style, made of aqua, or occasionally dull olive green, glass in two-piece mold. They have blob-top finishes and are embossed "NAPA/SODA/PHIL CADUC//NATURAL/MINERAL WATER" (Fig. 33b). We have 11 specimens.

If, in the middle of the last century, diligence, flexibility and the eternal pursuit of the main chance were in fact the ideals of American economic life, then Philip Caduc was an exemplar for his age. Born in Baltimore in 1831, Caduc heeded the first call of the gold rush and arrived in San Francisco in June, 1849. He went directly to the mines and by the end of the year had accumulated $8,000. With this as capital, he began what was, even for that era, an amazingly complex career.[45]

Returning to San Francisco, he promptly became involved in various ways in the storage and shipment of supplies. As a partner in the firm of Mohler, Caduc & Co., he bought storeships and rented storage space in them. The firm also worked as lightermen, unloading ships and providing water and ballast for those leaving port. On his own he built Howison's pier, where the ships were kept. From this base he branched into inland navigation, building a steamship and at various times operating at least three steamship lines.[46]

During 1855 or 1856, Caduc arrived in Sacramento, where he formed a partnership with William Firderer. From their ice depot on Third Street between J and K streets, Firderer & Caduc served as agents for the Sitka Ice Company, an enterprise founded in San Francisco which consolidated three earlier ice firms in order to control the sale of ice in the region. With its own vessels the firm brought ice south from Russian Alaska and sold it at a handsome profit through its numerous regional dealers.[47] The intensity of the summer demand in Sacramento is well illustrated in an account of 1856:

> The impatience manifested in every quarter was intense, and the office of the Ice Company resembled the neighborhood of the Post Office upon the arrival of the Atlantic mails. Two lines were formed, extending far down Third Street, and each man in the line had 'a' blanket or basket. The wagons arrived loaded with the necessary article, and during the remainder of the day peace and quiet reigned amongst the eager recipients of this most desirable luxury...[48]

Given this kind of market and the company's virtual monopoly for several years, its high profits are understandable.[49]

Firderer & Caduc, meanwhile, ensured a more seasonally balanced trade by adding a coal yard to their icehouse in 1857. Two years later, when cheap ice became available in the Sierra, they gave up the agency for Sitka Ice and began competitively supplying Grass Valley ice to Sacramento, Stockton, and Marysville.[50]

In 1859, Firderer and Caduc dissolved their partnership, Caduc retaining possession of the business on Third Street. In the summer of 1861, he imported the first supply of Napa Soda to the Sacramento market.[51] The bottles for the soda at that time, however, seem not to have been embossed; Caduc cautioned consumers of Napa Soda to note that "bottles containing the genuine article are invariably painted white on the bottom." Also, a trademark application filed in the same year was not for an embossed label, but for white-painted bottle bases.[52] Soda water, however, seems to have been one of Caduc's less important business interests as it does not appear in his directory listings until 1867, by which time he had also acquired the agency for Pacific Congress Water.

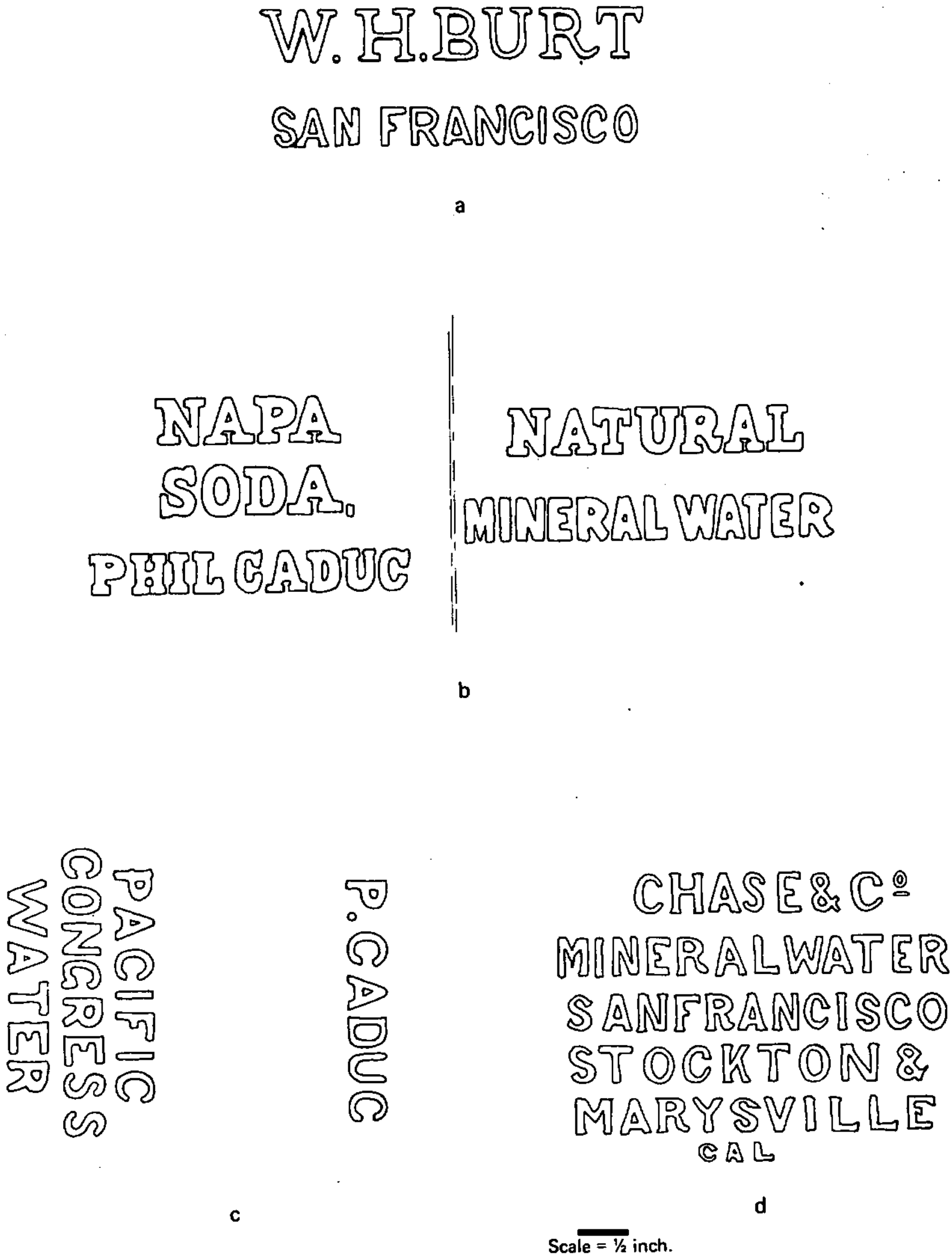


Figure 33. Embossed soda and mineral water labels: a) W. Burt; b-c) Phil Caduc; d) Chase & Co.

Meanwhile, Caduc had begun to develop more of his interests in San Francisco. Though he continued to operate his Sacramento enterprises, he had in 1863 moved his residence back to San Francisco. In 1867, the directory for the latter city revealed the extent to which Caduc's business interests had diversified. He was listed as the proprietor of the American Cobble Stone Depot (doubtless an outlet for the quarries being operated under his direction by the Natoma Ditch Co. in Folsom), and agent for numerous other products, including Stika Ice (an agency he had resumed in 1861), Napa Soda, and Pacific Congress Water.[53]

In Sacramento, Caduc advertised as a dealer in coal, ice, and natural mineral water. By 1870, he supplied:

> Lehigh, Cumberland, West Hartley, Bellingham Bay, and other desirable qualities of hard and soft coal, at greatly reduced rates.
>
> Saloons and Families supplied with NAPA SODA and PACIFIC CONGRESS WATER. Consumers will take notice the GENUINE waters are invariably delivered in BOTTLES with the name "Napa Soda" or "Pacific Congress Water", blown in the glass.[54]

It is interesting that Caduc's San Francisco involvements also included soda waters. In 1871, he is recorded as a partner, with George F. Bragg and P. G. Somps, in the Steam Soda Works of San Francisco. Somps, a decade later, had $40,000 invested in his factory and was turning out 15 doz bottles of soda per day, but whether Caduc still retained an interest in the enterprise we do not know.[55]

Caduc continued to be found among the Sacramento directory listings until 1882 when he apparently concentrated his energy on his San Francisco businesses and sold out his other holdings. In 1881, Louis Leloy (see below) obtained from Caduc the Sacramento agency for Napa Soda, and C. Sellinger took over the operation of the coal and ice depot.[56]

In San Francisco the scope of Caduc's activities seems to have narrowed. For the following two decades the only business association listed for him in the directories was the Patent Brick Co., "the largest institution of its kind on the Coast," of which he was president. His social and financial position at the time seems to have been quite secure. Lauded by a contemporary biographer as "one of the ablest financiers" in California, he was wealthy enough to have his daughters educated in Europe and to maintain a prominent position in Bay Area yachting circles. There his early involvement in the shipping industry earned him the appelation "commodore," and he was appointed by the governor in the late 1880s to a four-year term as a pilot commissioner.[57]

Though he continued to maintain his social position, by the end of the century Caduc's luck had changed. In ill health and with failing eyesight, he finally underwent surgery. It was unsuccessful, and he died late in 1902. His entire estate at the time was declared to be only $4,000, all in personal property. Even this went largely to creditors.[58]

<u>Phil Caduc, Pacific Congress Water</u>

Another Caduc project is represented by a standard, 9-oz container of aqua glass, made in a two-piece mold. It has a blob-top finish and is vertically embossed "P. CADUC //PACIFIC/CONGRESS/WATER" (Fig. 33c). We have three specimens.

Phil Caduc had the Sacramento agency for Pacific Congress Water from 1867 to 1881, though he may not have used embossed bottles until 1869. For more information see Caduc's Napa Soda.

Hugh Casey, Eagle Soda Works

The collection contains only a fragment of a single bottle from this manufacturer. The glass is aqua and seems to be from a patent style bottle, but neither the finish nor the base is preserved. The embossing on one face reads "HUGH CA[SEY]/EAGL[E]/SODA W[ORKS]."

Hugh Casey ran the Eagle Soda Works from 1886 to 1905. For a more general account, see Owen Casey.

Owen Casey, Eagle Soda Works

The containers of this firm are among the more common soda bottles in the collection, 47 having been recovered in Old Sacramento. The bottles are standard style, either of cobalt blue or emerald green glass, and made in two-piece molds. The necks sometimes exhibit twist marks, and all have a blob finish. These 9-oz containers are embossed "OWEN CASEY/EAGLE SODA/WORKS//SAC CITY" (Fig. 34a).

In 1857, Owen Casey first appeared in the Sacramento city directories, listed in partnership with Ephraim L. Billings, a well-established soda water manufacturer in the city. Although Casey may have arrived in the area before this time, there is no evidence to support his operation of a soda water factory prior to 1857.[59]

In 1858, Casey dissolved his relationship with Billings and opened a liquor store and soda water bottling establishment which would not close for three generations. Casey formed a partnership with James Kelly, and the firm of Casey & Kelly was established at 109 K Street. This firm was among those Sacramento industries listed in the 1860 Census Schedule of Manufacturers. According to the census, the firm had $500 invested capital and raw materials valued at approximately $2,000. Through their employment of two male laborers at an average monthly cost of $150, Casey & Kelly were annually producing 1,000 doz bottles of soda water with a value of approximately $5,000. If these figures are accurate, it would seem that the firm was barely breaking even, and therefore we must conclude that the figure of $5,000 does not represent the retail value of their products but rather the "total cost of production."[60] Furthermore, since division of this value by the stated production total yields a production cost per bottle of 42¢ -- astronomical even by today's standards -- we must conclude that the real annual production was 10,000 doz bottles.

The bottles used by the firm during the first few years were unmarked, but in 1861 the company adopted the device of painting the bottoms of the bottles blue, with an additional blue stripe on the side. Two years later, having decided to invest in embossed containers, they trademarked the use of a large "C & K" blown in the glass.[61]

James Kelly apparently died about 1867, and Casey seems to have operated briefly on his own before moving the firm to 50 K Street and forming a new partnership known as Casey & Schoonmaker. This association was short-lived and, in 1869, Arthur Crozier briefly became Casey's partner, lasting but one year. From 1870 until his death in 1873, Owen Casey operated his liquor store and soda water bottling establishment without a partner.[62]

Figure 34. Embossed soda water labels: a) Owen Casey; b) Casey & Cronan; c) Casey & Kelly; d) Michael Cronan.

In 1873, Owen Casey's son, Hugh, took over the family business with Hugh Kelly, son of Owen Casey's original partner. Once again the firm was styled Casey & Kelly. In 1874, Casey & Kelly were first listed as proprietors of the Eagle Soda Works, although their fathers had bottled soda water under that name in the 1850s. In that same year, Hugh Casey apparently bought out Kelly's interest in the firm. In 1875, the firm of Casey & Cronan replaced Casey & Kelly.[63]

Michael Cronan first appeared in Sacramento in 1873 as the proprietor of the Brooklyn Hotel.[64] In 1875, he and Hugh Casey advertised themselves as

> ...importers and dealers in foreign and domestic WINES AND LIQUORS. Sole agents for Pride of Kentucky Whiskey, and proprietors Eagle Soda Works, no. 50 K Street bet[ween] 2nd and 3rd.[65]

In 1880, the census once again described the scope of the business. Casey & Cronan had invested more than $3,000 in the firm, employing three men over 16 years old at an annual cost of $2,500, and were in possession of raw materials valued at $2,000. The firm operated 12 months of the year, 10 hours a day, bottling mineral and soda water which was valued at $6,000. Again we must conclude that this value represents only the cost of production and that company profits either went unrecorded or were grossly understated.[66]

Hugh Casey and Michael Cronan continued as partners in the wholesale liquor business and as proprietors of the Eagle Soda Works until early in 1885, when Cronan established his own liquor wholesaling business and Hugh Casey retained sole proprietorship of the business at 218 K Street (a new address for the location that had formerly been numbered 50 K).[67]

From 1886 until 1905, Hugh Casey was the sole proprietor of the Eagle Soda Works and the family wholesale liquor business. In the latter year, John S. Casey formed a partnership with Edward C. Kavanaugh and took over the liquor business and soda works from his father. Casey & Kavanaugh ran the operation at 218 K Street until 1910, when they moved to 401 J Street and John Casey opened another saloon on Riverside Road. In 1913, John Casey apparently left the firm, and the management of the family's company was taken over by Edward Kavanaugh. Kavanaugh may have been married to one of J. S. Casey's sisters, however, as he had moved into the house at 808 M Street, which had been the Casey residence since 1874.[68]

In 1913, John Casey opened an automobile dealership at 1900 M Street, known as the Casey Motor Company; it later became the Tourist Garage. Subsequently, Casey was an employee of the California Department of Agriculture and, in 1930, he was the head of the Department of Weights and Measures. Edward Kavanaugh continued in the wholesale liquor business, operating the Kavanaugh Mercantile Company, until he disappeared from the Sacramento directories in 1918.[69]

Casey & Cronan

Only six bottles from this company have been recovered in Old Sacramento. Patent style bottles of aqua glass with a blob-top finish, they were blown in a two-piece mold. One side is embossed "CASEY & CRONAN/EAGLE/SODA WORKS," while the base is embossed "GRAVITATING STOPPER/MADE BY/JOHN MATTHEWS/PAT OCT 11 1864/NEW YORK" (Fig. 34b).

The company was in business from about 1875 to 1885. Its history is discussed under Owen Casey.

Casey & Kelly, Eagle Soda Works

Eight bottles have been recovered to represent this firm. They are standard style 9-oz containers, made of cobalt blue glass in a two-piece mold and with a blob-top finish. The embossing reads "C. & K./EAGLE WORKS/SAC CITY" (Fig. 34c).

Bottles such as these were made from 1863 until about 1867 by Owen Casey and James Kelly. For the history of the firm, see Owen Casey.

Chase & Co.

Only one broken example of this container was found -- a 9-oz emerald green standard bottle from a two-piece mold. The finish is missing, but the bottle is embossed "CHASE & C^O/MINERAL WATER/SAN FRANCISCO/STOCKTON/MARYSVILLE/CAL" (Fig. 33d).

Fred C. Chase, a native of Massachusetts, operated soda water factories in San Francisco, Stockton, and Marysville in the early 1850s. The San Francisco branch of Chase & Co., located on Broadway near Kearney Street, was probably in operation as early as 1851. By 1853, Abel W. Cudworth had joined the firm, which had been moved by that year to the intersection of Vallejo and Pinckney streets. In 1856, Cudworth bought out Chase & Co.'s San Francisco operation and, as Cudworth & Co., it continued at the same location until at least 1862.[70]

The Stockton factory seems to have been functioning as early as the spring of 1852, and may have been the first soda water factory in that city. By the mid-1850s, the plant was located at the intersection of Market and Commercial streets. J. D. Vaughn bought it from Chase & Co., probably in 1856, and manufactured soda water at the same location until around 1865.[71]

Chase & Co.'s Marysville factory was operating at the intersection of Sixth Street and "the alley above A Street" in 1853. The company advertised both soda and sarsaparilla for sale, "carefully packed and sent to any part of the mines." By 1858, Chase appears to have sold his Marysville factory to P. Brader and Co. The address of Brader's firm was 165 Yuba Alley, probably the same location where Chase had operated. Three members of the Brader family, all natives of Missouri, were employed by the company. Two of these three, Louis and Peter, later ran the Excelsior Soda Works in San Francisco.[72]

Although Chase had operated soda water factories in Stockton and in San Francisco, he appears to have resided in Marysville. After selling the Marysville plant to Brader, he became a clerk for the Sitka Ice Co. By 1860, however, Chase and Co. were again in the soda water business at the Yuba Alley address and remained so until 1865. In 1860 and 1861, Chase also operated Chase and Co. Vinegar Works on Third Street in Marysville. A Frederick C. Chase is listed in the Central Pacific Gazette of 1871 as a well borer and pipe repairer, but whether this is the former soda manufacturer is not clear from the sources available.[73]

Clarke & White, Congress Water

These five pint bottles, our only specimens of embossed Saratoga style containers, are made of black (dark olive green or dark Lincoln green) glass in two-piece molds and have sloping-collar finishes. All are embossed "CLARKE & WHITE" in a semi-circle over "NEW YORK"; in some of the bottles a large "C" is embossed within the semi-circle (Fig. 35a).

The springs at Saratoga, New York, were first visited by Europeans in 1755, and the Congress Spring was discovered in 1792. Though the natural high carbonation of the waters attracted much early scientific and medical interest, the springs were of little commercial importance for several decades. The first attempt to bottle water from the Congress Spring was made in 1822. This venture was not particularly successful, however, and the real exploitation of the spring did not begin until the arrival of John Clarke, a few years later.[74]

"Dr." John Clarke (the doctorate was self-administered) had been born in Yorkshire about 1773. Emigrating to America, he settled in New York City, where, in 1819, he opened the city's first soda fountain. Having been successful in his metropolitan pursuits, Clarke in 1823 purchased a large tract in Saratoga, including the site of the Congress Spring.[75]

Clarke soon became the dominant figure in Saratoga's economy, expanding the facilities for visitors to the springs, laying out streets, draining marshes, and donating parks. Largely as a result of his improvements, and of other capital they attracted, Saratoga soon became the most important spa in America, and the Congress Spring America's best-known source of mineral water.[76]

In 1825, the firm of Lynch & Clarke began bottling Congress Water and shipping it to New York and other cities. The bottling operation, which was conducted "in a building resembling a giant shower bath," by 1830 employed a man and a boy full time and produced 1,200 bottles of the water per day. The name of the firm was changed in 1833 to Clarke & Co., and it operated as such for the following two decades.[77]

During this period, Saratoga took on the character of an internationally known resort which it was to retain for the rest of the century, combining the appeal of its health-inducing waters with many attractions of a more social nature. While this combination was certainly beneficial to Clarke and other promoters, it was of mixed beneift to visitors. As noted by one medical observer, Saratoga's springs

> are principally saline and chalybeate, and under medical supervision a large number of affections may be treated successfully by them. They are useful in the treatment of dyspepsia, engorgement of the liver, and chronic constipation. The climate of Saratoga is stimulant and tonic... During the season from June to early September, it is a fashionable, well-equipped resort, but there are also ample accommodations for persons of moderate means. Saratoga offers accommodation for 20,000 visitors at one time. There is a lake four miles distant. Saratoga boasts of a famous racetrack, and there are opportunities for kindred sports. It may be visited by quiet folk in autumn after the crowds have departed...
>
> The disadvantage of Saratoga from a therapeutic standpoint is that there is no organized system of control applying to persons seeking the benefit of the waters. One may drink as much as he likes of any spring, and very many who go there for the waters use them in a desultory manner, without medical supervision. The liberal diet of the hotels, the temptations to excess in food and drink, and the tendency to keep late hours, which are characteristic of life at the fashionable American resorts, combine to render a cure almost impossible.[78]

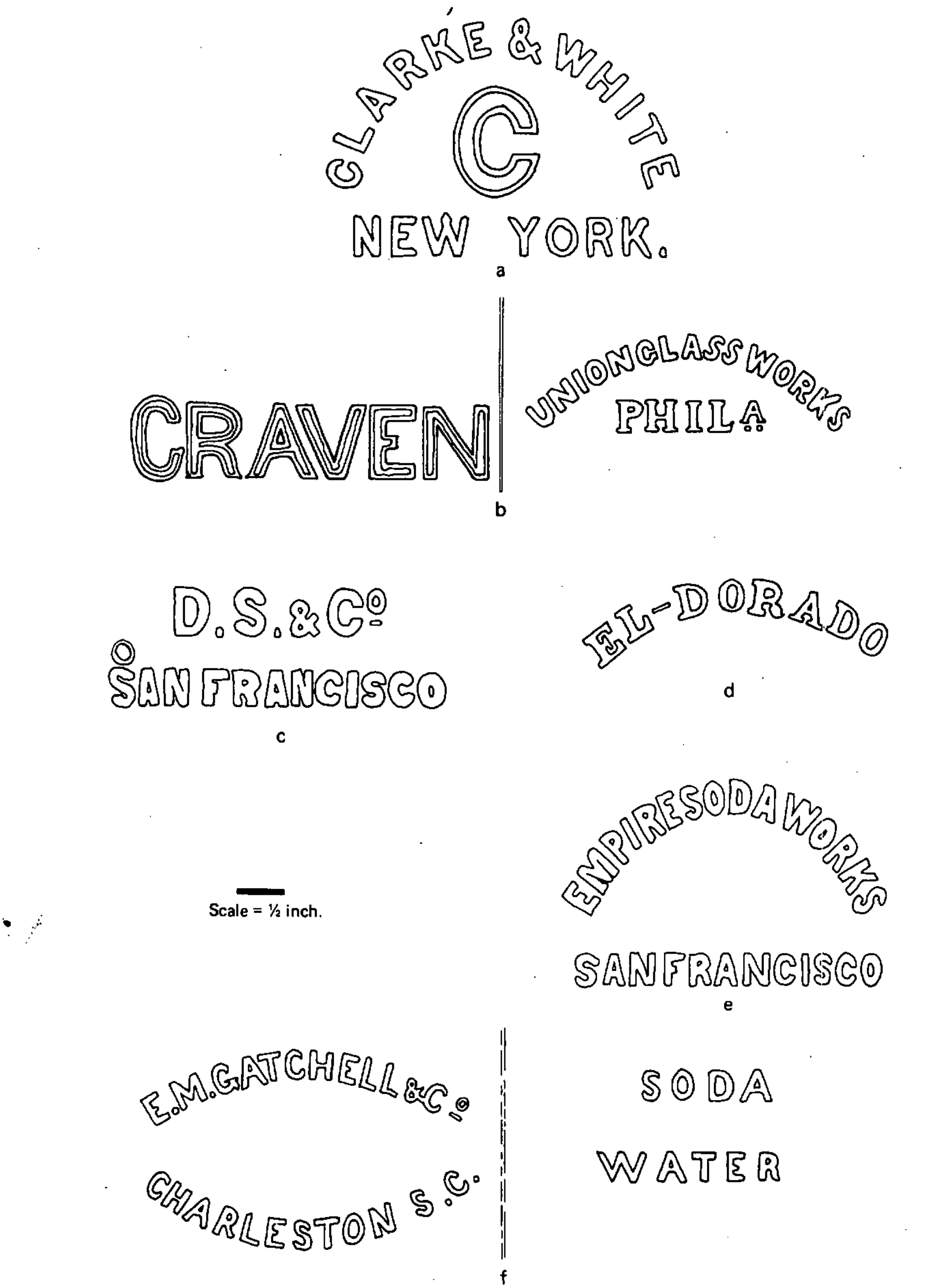


Figure 35. Embossed soda and mineral water labels: a) Congress Water; b) Craven; c) Delahanty, Skelly & Co.; d) El-Dorado; e) Empire Soda; f) E.M. Gatchell.

John Clarke died in 1846. Congress Water continued to be bottled by his family for a few years under the old firm name of Clarke & Co., but in 1852, the style was changed to Clarke & White.[79] The water was being exported to California by 1853, and generally retailed for about 25¢ per bottle.[80] George B. Clarke and William B. White -- probably John Clarke's son and stepson -- continued to bottle and ship Congress Water, maintaining a depot in New York at 98 Cedar Street, until 1865. At that time the operation was taken over by the Congress & Empire Spring Co., who bottled both Congress Water and Empire Spring Water (another Saratoga product), apparently until the springs were taken over by the state in the present century.[81]

Craven

The single bottle of this firm is a standard 9-oz container of teal green glass, made in a two-piece mold. It has a blob-top finish and a slug-plate label, "CRAVEN//UNION GLASS WORKS/PHILA" (Fig. 35b).

The firm responsible for this embossing has been particularly difficult to trace. In the various city directories that were researched, one brief entry was located which may account for the embossing. Peter Craven was listed in New York in 1876 as a bottler. There was, however, no indication as to whether he had his own business, or was employed in another bottling operation. Between 1877 and 1881, when he was listed for the last time, he was either a clerk or a bartender.[82]

It should be noted that John V. Craven, listed in the 1868 New York directory as a glass manufacturer, was not connected with this mark, since he was a partner in the Salem, New Jersey, glassworks of Hall, Pancoast and Craven.[83]

Michael Cronan

The lone bottle from this manufacturer is a pale aqua 8-oz container of patent style with blob-top finish. It is embossed on the side "M. CRONAN/230 K STREET/SACRAMENTO" and on the base "SAC/SODA WORKS" (Fig. 34d).

Michael Cronan arrived in Sacramento during the early 1870s and first appeared in the directories in 1873. He and Frank Larney were listed as the proprietors of the Brooklyn Hotel at 85 Front Street between K and L streets. By 1875, the partnership had dissolved, and Michael Cronan entered the beverage business.[84]

In 1875, Cronan became the partner of Hugh Casey, son of the long-time Sacramento bottler Owen Casey.[85] Casey & Cronan were "importers and dealers in foreign and domestic Wines and Liquors, sole agents for Pride of Kentucky Whiskey, and Proprietors [of the] Eagle Soda Works."[86] For the next ten years, they were in business at 218 K Street, constantly expanding their wholesale liquor market (see Owen Casey).

Early in 1885, Cronan left the firm and established his own liquor distributorship at 230 K Street. By 1895, he had expanded his operation to include a second location nearby, at 1108-1110 Third. Cronan was the sole agent for the California Favorite brand of bourbon and "importer and wholesale dealer in fine whiskies, Brandies, [and] champagnes."[87]

By 1898, Cronan had taken George Wisseman into partnership. Wisseman was destined to become an extremely wealthy man by the time of his death in 1909, possibly worth three-quarters of a million dollars, as a result of his many business activities throughout the northern California and Nevada region. The Wisseman-Cronan partnership was dissolved by 1901, and Cronan established the firm of Michael Cronan & Co. at 323 K Street, having turned his previous location over to Wisseman. Cronan died on December 10, 1908, but his widow, Julia, took over the liquor business, and Michael Cronan & Co. remained an active part of the Sacramento business community until 1911, when Julia Cronan apparently sold out her interests in the firm.[88]

Delahanty, Skelly & Co.

Another lone specimen, this 8-oz bottle is aqua, of standard form, made in a two-piece mold, and has a blob-top finish. The embossing is from a slug plate and reads "D. S. & CO/SAN FRANCISCO." It represents the Empire Soda Works, under the proprietorship of Delahanty, Skelly & Co. (Fig. 35c).

The Empire Soda Works first appeared in the 1854 San Francisco city directory, although an 1856 advertisement claimed that the firm was established in 1851. The first proprietors of the factory were John Delahanty and Michael Skelly. In 1854, the Empire Soda Works was listed at 83 Pine Street; in 1856, at Mission Street near the corner of Third Street; and, in 1860, on Third Street between Jessie and Stevenson streets.[89]

In 1860, Michael Skelly dropped his association with the soda manufactory, and instead, was listed as the proprietor of the People's Line City and Mission Omnibuses. Skelly & Co. (as the soda enterprise was then styled) was led by Peter Skelly along with his junior partners, Michael Fagan and John Delahanty. In 1861, the Empire Soda Works was once again listed under the proprietorship of the original names, Delahanty, Skelly (Peter), & Co. and so remained until 1864.[90] In 1861, the firm trademarked the "D S & Co." monogram which they were then having embossed on their bottles.[91]

Beginning in 1864, the Empire Soda Works underwent a rapid succession of proprietary names. In that year, Delahanty and McGuirk were the listed proprietors at 29 Third Street; in October, the partners of the firm (John Delahanty, James McGuirk, and Lawrence McGuirk) trademarked the name "Empire Soda Works," as well as their new monogram "D & M," and began having them embossed on their bottles. In 1865, the soda works was moved to the corner of Third and Harrison streets; Fagan, Bliven & Skelly were the new proprietors. Michael Fagan and one of the original owners of the Empire Soda Works, Michael Skelly, had formed a partnership, taking in a third member, James I. Bliven. In 1869, Skelly dropped permanently from the operation, and Henry P. Rice became the third partner in Fagan, Bliven & Co. In 1872, James Bliven had established himself in the axle grease business, while Michael Fagan was an employee of the Bay City Soda Water Co., a firm which operated until 1913. In 1874, however, Fagan was again listed as the proprietor of the Empire Soda Works, at 821 Folsom Street. This is the last designation of Fagan's factory as the Empire Soda Works, although he continued as a soda water manufacturer until 1880.[92]

From 1880 until 1882, Francis S. Waldo was listed as the proprietor of the Empire Soda Works. Presumably he had acquired the business from Fagan within the previous year. Waldo seems to have operated an additional factory in Alameda and to have distributed its soda in San Francisco along with that of the Empire Soda Works. As a further complication, the latter factory was located at 1721 Market Street, the same address as the Pioneer Soda Works.

Waldo's association with the Empire Soda Works proved to be the final indication of a San Francisco firm under that title; there is no mention of the Empire Soda Works after 1882.[93]

Henry Del Meyer

A broken standard soda water bottle of pale aqua glass from a two-piece mold, this specimen is missing the finish, but is embossed "H. DEL[ME]YR/ BROOKLYN."

Henry Del Meyer ran a bottling operation in Brooklyn, New York, from 1850, possibly earlier, until 1873. Initially, he manufactured and bottled root beer at an establishment on Flushing Avenue. In 1854, he had moved to Graham Avenue, and was manufacturing mineral waters. From this time until 1873, he was listed under Mineral Waters, Soda Waters, and Bottling.[94]

It seems as if Del Meyer, by 1874, had become more concerned with the sale and distribution of liquors than with the soda water operation. In 1878, the mineral and soda water business was again listed, but was being run by his son, William F. Del Meyer, who may have continued the operation well into the twentieth century. The last available directory for Brooklyn, in 1881, lists William in Mineral Waters. Henry, who was not included in the 1880 directory, is noted as operating a laboratory. This is an entirely new occupation, and it is possible that this listing refers to another son and that Henry, Sr., had either moved or died in the intervening two years.[95]

William Eagle

This broken bottle is of teal green glass in standard form, and made from a two-piece mold. The embossed label is "W.[EA]GLE/VESTRY, VAR[ICK]/& CANAL// PREM^{M}/ SODA WATER/UNION GLASS WORKS/PHIL^{A}."

William Eagle operated his bottling establishment for more than forty years in New York City. Between 1841 and 1846, Eagle began to bottle soda water at 148 Fulton Street. By 1847, he was listed as a dealer of "soda and mineral water, porter, ale, &c."[96]

One of William Eagle's relatives, George Eagle, was also involved in the bottling business. George was initially listed in the 1841 New York directory as a bottler, and in 1842 as a dealer in porter and ale. It is unclear whether George and William were brothers, or George was the father of William, but the two periodically shared a residence until George's death in 1867 or 1868. George and William also apparently worked closely together, and their advertisements reveal that they were dealers in the same products. In 1850, George dealt in "Porter, Ale & Cider, Soda & Mineral waters, London Brown Stout, & Scotch ale." The next year, while George's listing noted only "Porter &c.," William's advertisement more fully delineated his stock as "premium soda and mineral water, Philadelphia and London porter, XX & Scotch ales, champagne cider, &c." This pattern of alternating yearly advertisements continued for at least the next decade, suggesting that the two men may have been working together in one business rather than in separate firms.[97]

In 1852, William moved his business from Fulton Street, where both he and George had operated, to 71 Varick Street; in 1854, the address was listed as Canal corner of Vestry Street. As Canal, Vestry, and Varick streets all meet at the same intersection, it seems likely that the two addresses reflect the samé location.[98] By 1861, William Eagle was listed as an "importer of Scotch ales, London & Dublin porter, soda water manuf[acturer] &c."[99] An 1866 advertisement claimed:

> William Eagle, has always on hand a large supply of London and Dublin Porter, Scotch and American ales, from the most celebrated breweries. Bottling establishment cor[ner] Canal & Varick Streets. Also, Cider for Shipping and City use.[100]

The business continued in operation until William Eagle's death in 1886.[101]

El Dorado

This enigmatic container is a 9-oz standard bottle of teal green glass made in a two-piece mold and with a blob-top finish. The only embossing is the label "EL-DORADO" (Fig. 35d).

The best available assessment of this firm's bottle is provided by Markota and Markota:

> There is no information available on this particular bottle. However, we did find a[n] El Dorado brewery in almost every town we did research in, which makes us believe this bottle may have been used as a beer bottle, or it may have been used to bottle soda or mineral water which was bottled as a side business by one of these breweries and not advertised as such, which was not an uncommon practice in those days. Personally, we believe in the latter.[102]

Empire Soda Works

A piece of aqua glass, apparently from a standard soda water bottle, embossed "EMPIRE SODA WORKS/SAN FRANCISCO" is all we have of this vessel (Fig. 35e).

Markota and Markota illustrate bottles with this label alone, and also specimens with the additional name "FRANK S WALDO" embossed vertically on the back.[103] The former type is probably associated with the operation of the Empire Soda Works by a series of proprietors from 1865 to 1880. The latter type clearly derives from the factory's operation by F. S. Waldo from 1880 to 1882 (see Delahanty and Skelly).

E. M. Gatchell & Co.

Among the few bottles in the collection which came from the American South are the two emerald green, 10-oz standard bottles for this soda works. They were made in a two-piece mold with an improved pontil, and have blob-top finishes. The embossed label reads "E. M. GATCHELL & C<u>O</u>/CHARLESTON S. C.//SODA/WATER" (Fig. 35f).

Very little information is available on E. M. Gatchell. In 1849, he was listed as a druggist at 33 Market Street in Charleston, South Carolina. The business directory for the same year listed him as an M.D. in partnership with Charles Clarke.[104] An advertisement in the 1849 directory noted:

> Soda water bottling establishment of Gatchell & Co., chemists and druggists, Market, opposite Anson Street. Extensive arrangements have been made to deliver the article to Public Houses and Private families throughout the city, and also to get it up for EXPORTATION.[105]

Gatchell apparently died in 1850. A newspaper advertisement in the Charleston Courier of May 14, 1850, lists Charles Clarke as the surviving co-partner of Gatchell, stating that Clarke would assume all of Gatchell's debts. The advertisement continued:

> SODA WATER will be delivered as usual, at any part of the city, bottled fresh every day... SODA WATER on draft throughout the year, at the old stand... Orders from the country promptly attended to.[106]

Both the 1851 and 1855 Charleston directories confirmed that Clarke had taken over both the soda works and Gatchell's pharmacy. How long Clarke continued in business is difficult to assess; a full series of directories was unavailable. Clarke seems to have been operating the factory in 1859, but, by 1867, he was no longer listed.[107] It is quite likely that Clarke, if he remained in the soda water business, would have continued to use and reuse the bottles which had been embossed with Gatchell's name, at least until the supply ran out.

E. Harley

This lone 8-oz teal green bottle is a standard style container made in a two-piece mold, with a blob-top finish. The base shows an improved pontil mark, and the face has a slug-plate label embossed "E. HARLEY/802/MARKET ST."

From the street address, we had assumed that the manufactory was located in San Francisco, but we have been unable to find references to this enterprise.

Hires Root Beer

Two types of Hires bottles are present in the collection. The larger type, for the root beer itself, is of aqua glass, straight-sided and semi-round-based, holds 15 oz, and has an applied crown finish. The slightly indented base is embossed "Hires." We have one example.

The second variety, made to hold root beer extract, is also of aqua glass -- a small (3-oz), square bottle, made in a two-piece mold and with a squared-lip finish. All four sides are vertically embossed: "HIRES IMPROVED/ROOT BEER//MAKES FIVE/GALLONS OF A/ DELICIOUS DRINK // MANUFACTURED BY / THE CHARLES E. HIRES CO // PHILADELPHIA PA/ U.S.A." (Fig. 36b). We have three specimens.

Charles E. Hires was born in 1851. In 1869, after a six-year apprenticeship in the retail drug trade, he opened a pharmacy at Sixth and Spruce streets in Philadelphia. A few years later, while vacationing on a New Jersey farm, he was given a cup of herb tea made from locally gathered sweet fern, sassafras, and teaberries. This appealed to him so much that he began experimenting with the recipe and soon perfected a marketable formula for a carbonated version. This drink, Hires Root Beer, was introduced at the Centennial Exhibition in Philadelphia in 1876. It quickly proved popular and by the end of its first year on the market, Hires had sold the equivalent of 115,200 glasses.[108]

The root beer as marketed for home consumption at the time was sold in paper packages for 25¢. It consisted of a dry preparation of mixed ingredients, which could be used to prepare 5 gal of root beer, but which required steeping in boiling water. In spite of the labor required of the consumer, this dry preparation, aided by systematic advertising, was an immediate success, and, in fact, continued to be sold well into the present century.

Nonetheless, Hires perceived a market for a more easily prepared root beer, and during the 1880s introduced a liquid extract, sold in 3-oz bottles, which yielded the same amount of root beer for the same price, but was less trouble to prepare. Meanwhile, having been successful with a heavy advertising campaign in Philadelphia, Hires, in 1884, began using magazines of national circulation. By 1892, almost three million bottles of extract were being sold annually. In 1893, bottled root beer was put on the market, and in 1904 the company began to market specially bottled syrup for soda fountains.[109]

Figure 36. Bottles of unusual style: a) Basal embossing from Hires Root Beer bottle (cf. Fig. 30c); b) Hires Root Beer extract bottle; c) Hunyadi Janos bottle and basal embossing.

Hires' advertising during this time, like that for other soda waters, had a somewhat medicinal flavor, touting the root beer as

> The purest and best drink in the world. Appetizing, delicious, sparkling, and the best blood purifier and tonic.[110]

As late as 1894 a company brochure warned consumers to

> Beware of Rootbeers that are bottled ready to drink... For your health's sake get a package of Hires Rootbeer and make it yourself...[111]

(This was printed a year after Hires himself had introduced bottle root beer, and the same brochure contained testimonials from customers who bought it "by the dozen bottles.") Although it was promoted as "a healthful beverage" and users claimed that "As a family medicine, I find it of great value," Hires wisely avoided claiming any specific curative effects.[112]

The company continued to expand its markets, and sales had reached an annual equivalent of seven hundred million glasses by 1922. Charles E. Hires died in 1937, but the company continued to be one of the largest soda producers in the United States. It was incorporated as a division of Crush International sometime after 1950.[113]

In spite of the well-known history of the Charles E. Hires Co., the present bottles are poorly dated. Information from the company suggests that both styles of bottles were produced beginning about 1910.[114] Since the Old Sacramento specimens are from an early twentieth-century deposit, there is no conflict between this information and the present archeological context. Other sources, however, though not conclusive, suggest that both types of bottles may have been in use by the turn of the century.

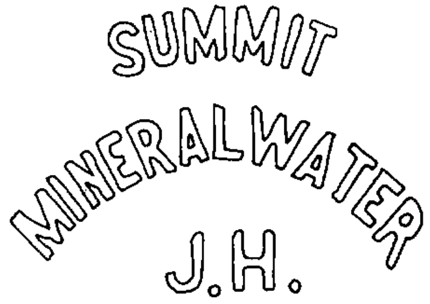
An embossed extract bottle, for example, was recovered during excavations at Fort Bowie, Arizona. This fort was abandoned in 1894, and although it is possible that the bottle was brought in later, there is little if any other material in the ample and detailed artifact report to suggest a noteworthy amount of deposition after the 1890s.[115]

We have already noted that bottled ready-to-drink root beer was introduced by Hires in 1893. We have no information at hand on the size or shape of these containers, or on whether they were embossed. By 1897, however, trade catalogs were offering Hires Root Beer in pints, and Hires ads were featuring illustrations of bottles with semi-rounded bases similar to the present one. The bottles also have a clearly discernible crown finish, and Hires may have been one of the first major companies to use this type of closure. It is impossible to determine whether these bottles were embossed, but it may be noteworthy that the Hires Co. in 1910 registered the single name "Hires" as a trademark, reporting it had been in use since 1891.[116]

Jacob Hoehn, Summit Mineral Water

This is an 8-oz container of green glass and standard style, made in a two-piece mold and having a blob-top finish. It is embossed "SUMMIT/MINERAL WATER/J. H." (Fig. 37).

Jacob Hoehn came to Sacramento from his home in Germany, arriving in the city about 1855 or 1856. From 1861 until 1870, Hoehn worked as proprietor of the Plaza Saloon at 286 J Street. In 1870, he became the Sacramento agent of the Summit Ice Company, doing business on I Street between Fifth and Sixth streets. That year, or in 1871 at the latest, he also became the agent for Summit Mineral Water, which was shipped to Sacramento from Summit Springs, 90 miles away in the Sierra, near the present site of Soda Springs.[117] The water from Summit Springs was described in the nineteenth century as an "antacid, diuretic, aperient, and tonic; most excellent in the treatment of dyspepsia, torpidity of liver and bowels, Bright's disease, irritation and stone in bladder, etc."[118]



Scale = ½ inch.

Figure 37. Embossed soda water label: Jacob Hoehn.

Throughout the 1870s, Hoehn continued to expand his business interests, acting as the agent for different products. An advertisement in 1874 for the Pacific Ice Depot lists:

> Jacob Hoehn agent, wholesale and retail dealer in Ice, Coal, Cement, Hair, Fire, Clay, etc. Agency for Pacific Ice Co.; Agency for Rocky Mountain Coal Co.; Agency for Summit Mineral Water; Agency for Armstrong and Small's Pat[ented] Fire Kindler.[119]

About 1882 or 1883, Hoehn took F. L. Ewing into partnership, and simultaneously ended his association with Summit Mineral Water. Thereafter, Hoehn's business concerns were coal, ice, and cement. Although Summit Mineral Water probably continued to be bottled, we have no evidence that it was sold in Sacramento after the termination of Hoehn's agency.[120]

Holden's Ginger Ale, Capital Soda Works

A single vessel of pale aqua glass, this 9-oz patent style bottle is unusual in having ten inch-high facets circling the base. The finish is a blob top. The bottle is embossed "HOLDEN'S/G. A." and the base is embossed "CAPITAL SODA WORKS/SAC." (Fig. 39).

No information has been found on either Holden or Capital Soda Works prior to 1882. In that year, William M. Holden was listed in the Sacramento directory as a soda maker at the Capital Soda Works. The owner of the soda works, however, is listed as Henry Postel. Five years later, Postel formed a partnership with Constant Schnerr to run the Capital Soda Works. (See Henry Postel and Constant Schnerr.)[121]

In 1884, Holden had apparently terminated whatever relationship he may have had with the Capital Soda Works and had formed a partnership with August Kuhn. Together, these men briefly were listed as the proprietors of the Union Soda Works at 1920 O Street. Almost twenty years before, in 1866 and 1867, Ephraim L. Billings had also been listed as proprietor of the Union Soda Works, but in the intervening years no other firm seems to have employed this title. In 1885, August Kuhn was no longer listed, and William Holden's final appearance in the directory mentions only that he was a carbonator for the Union Bottling Works which, at that time, was managed by R. C. Lowell. After 1885, Holden disappeared from Sacramento, as did all reference to the Union Bottling and/or Soda Works.[122]

Hunter & Barton, Victoria Dispensary

About a dozen bottles from this company were recovered. All were pale green torpedo style bottles, made in two-piece molds, with annular finishes. All were badly broken, but two distinct sets of vertical embossed labels could be reconstructed: "HUNTER & BARTON//HONG KONG//SUPERIOR//SODA WATER" and "AERATED LEMONADE// HUNTER & BARTON//VICTORIA DISPENSARY//HONG KONG" (Fig. 38).

We have no historical information on the company, but the archeological context may be of help, since most of the bottles appear to come from levels dated to the great fire of 1852.[123]

Hunyadi Janos

The bottles for this mineral water are round, strongly shouldered 24-oz vessels of black (dark olive green) glass, made in a two-piece mold, with short, narrow straight necks and an almost annular finish. The bases are embossed "SAXLEHNER$^{\underline{S}}$/ BITTERQUELLE/HUNYADI/JANOS" (Fig. 36c). The collection contains seven specimens, all from the same late deposit.

This bitter aperient water was collected and bottled by Andreas Saxlehner at a spring at Ofen, Hungary. He named it Hunyadi Janos after a Hungarian national hero of the fourteenth or fifteenth centuries, and first marketed it under this designation in 1863.[124]

The water was being shipped to California by 1879, and was advertised as "the best and cheapest Natural Aperient Water. The most certain and comfortable cathartic in cases of constipation and sluggish liver or piles." The label on the bottle was even more detailed, lauding its use for many health problems:

1. As a safe, ordinary and gentle aperient.
2. For habitual constipation.
3. By persons inclined to inflammation, congestion, and gouty disorders.

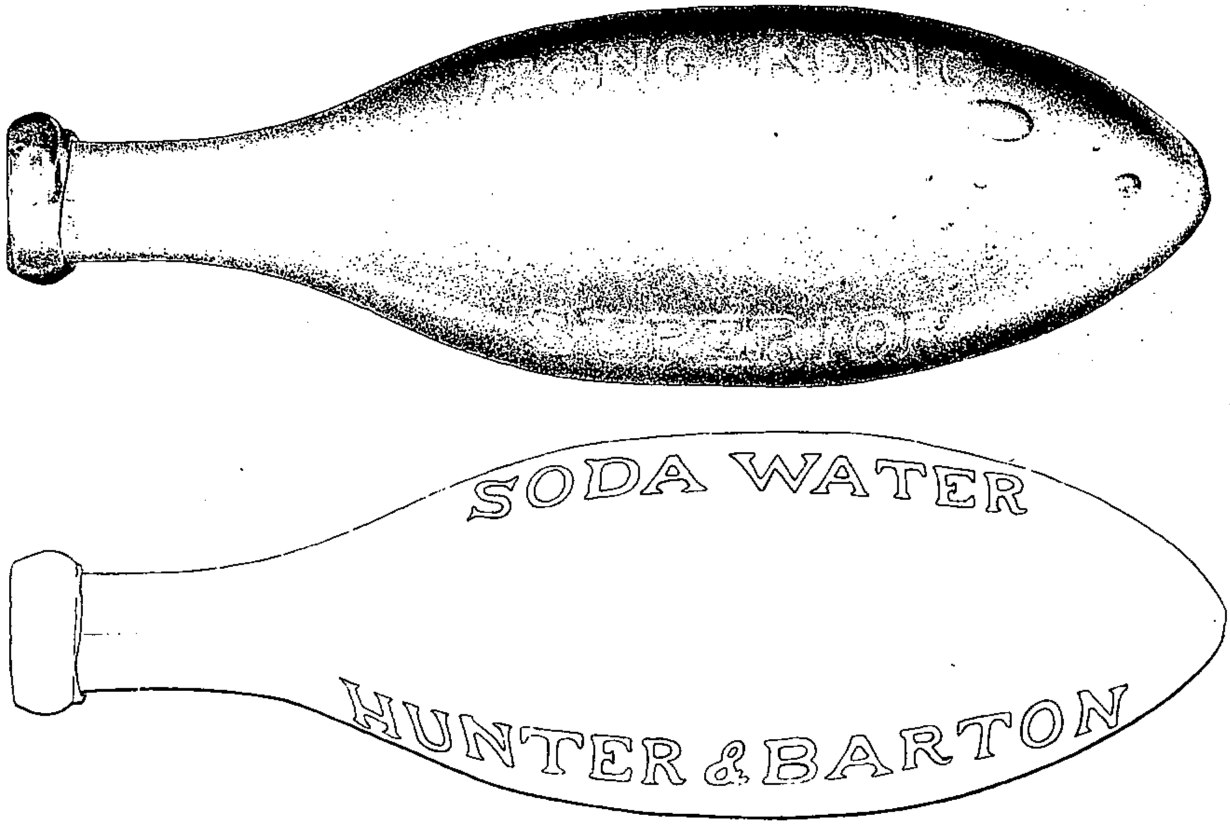


Figure 38. Hamilton style soda bottles (reconstructed): Hunter and Barton

Scale = ½ inch.

Figure 39. Embossed soda water label and base: Holden's Ginger Ale.

4. In chronic affections of the organs of respiration and circulation.
5. In organic diseases resulting from fatty degeneration.
6. Against undue disposition of fat in general.
7. Against haemorrhoids.
8. During pregnancy and in many female diseases.
9. In billious attacks and disorders of the liver.
10. [For] the evil consequences of indiscretion in diet.

Later advertisements added sick headache and nervousness.[125]

Hunyadi Janos retailed for 25¢ or 30¢ per "quart" in the late nineteenth century. It remained on the market at least until World War I.[126]

Italian Soda Water

This 9-oz standard bottle is of teal green glass made in a two-piece mold. It has a blob-top finish and a base exhibiting white paint over an improved pontil scar. The bottle is embossed "ITALIAN/SODA WATER/MANUFACTORY/SAN FRANCISCO//UNION GLASS WORKS/PHILA" (Fig. 40a).

The first Italian Soda Factory may have been established in San Francisco as early as 1852, if one may judge from later advertisements, although the early directories do not provide any confirming evidence. In 1856, Joseph Spinoni, proprietor of the Italian Soda Factory at the corner of Powell and Filbert streets, advertised that his firm was "Established by Girardin in 1852 and re-established by present proprietor in 1854."[127] Joseph Spinoni was first listed in the San Francisco directories in 1856 at Powell and Filbert streets; in 1858, his soda factory was moved to Stevenson Street. He continued to operate the Italian Soda Factory until 1860.[128]

In 1860, S. Grellier & Co. were the proprietors of the soda works, Grellier's partner was Frederick Monotti. The following year, James McKuen took Monotti's place. After 1862, no further mention was made of the Italian Soda Factory, and Grellier was no longer listed.[129]

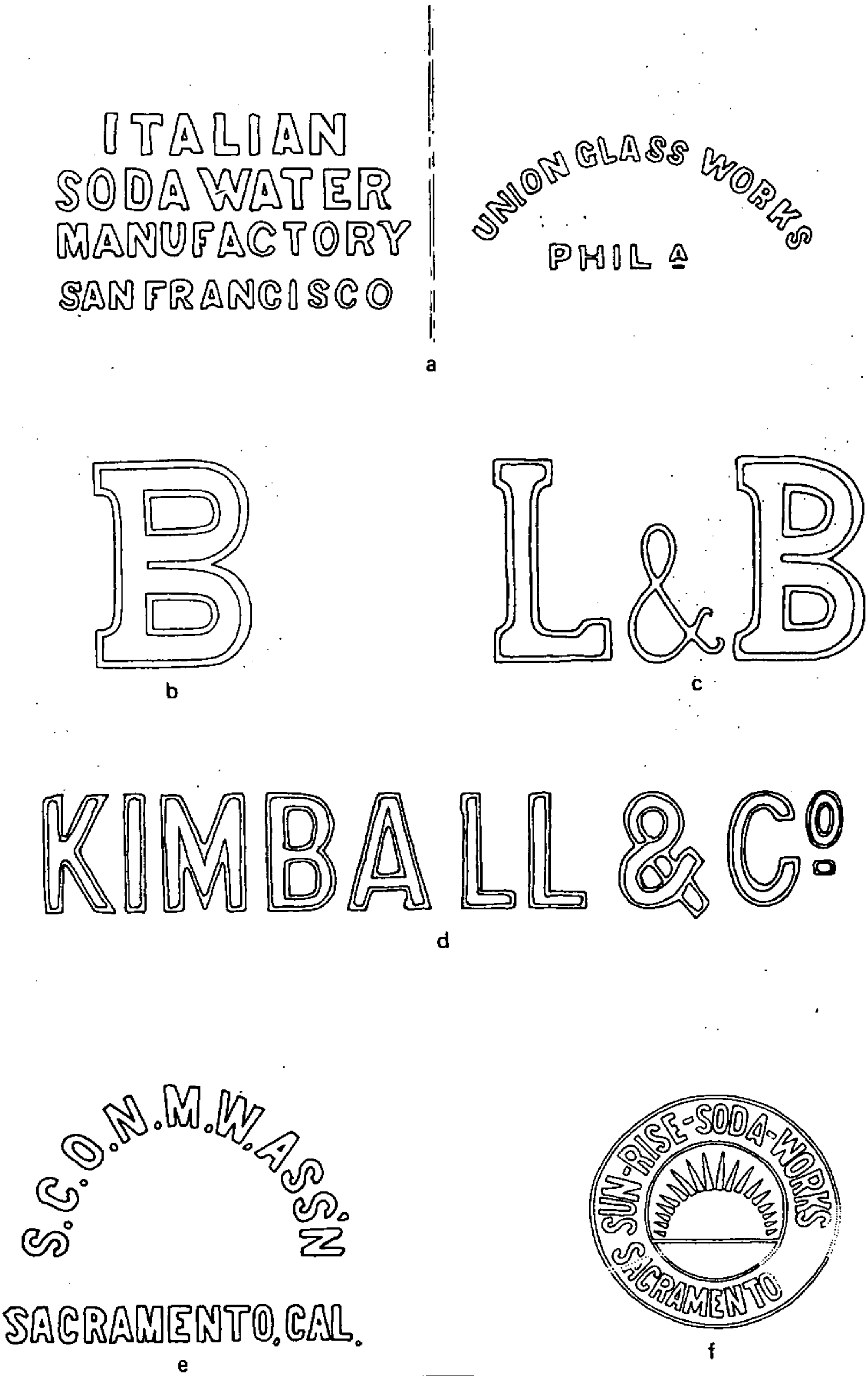
James McKuen, however, remained in the soda water business, operating the California Soda Works for the following six years and becoming in 1871 the president of the Bay City Soda Water Co. He remained president of the firm until his death in 1894.[130]

Kimball & Co.

This standard 9-oz, cobalt blue bottle was made in a two-piece mold. The base has an improved pontil scar. The bottle has a blob-top finish and is embossed "KIMBALL & CO" (Fig. 40d).

Charles H. Kimball, a native of Maine, was in the soda manufacturing business in Marysville as early as 1853. Kimball's factory, which also served as his residence, was located on B Street, between First and Front streets.[131]

By September, 1856, Kimball had decided to return to the East and put his factory up for sale. It was described at the time as having the "largest and most complete apparatus for manufacturing purposes now in this State." The factory sat on a 40-by-80-ft lot and had a well of pure water; the sale was also to include horse, wagons, and stock. Claims were made for a large trade in Marysville as well as a "good mountain trade."[132]



Scale = ½ inch

Figure 40. Embossed soda and mineral water labels: a) Italian soda water; b) Charles Belding; c) Lippincott & Belding; d) Kimball & Co.; e) Sacramento Cooperative Natural Mineral Water; f) Sunrise Soda.

Kimball was still advertising his factory for sale in April, 1857, and, whether or not he actually sold it, apparently he did leave Marysville; he was not listed in the city directories of the late 1850s or early 1860s. By 1867, however, a Charles Henry Kimball was listed in the Pacific Coast Directory as agent for the California Steam Navigation Company at the corner of D and Second streets in Marysville. The same listing is found in the Marysville city directory of 1870, but not in any directory thereafter. According to the Great Register of Yuba County for 1867, Charles Henry Kimball was 41 years old in that year and a native of Maine -- facts that suggest that Charles H. and Charles Henry Kimball were the same person.[133]

S. S. Knickerbocker

This bottle is of standard form, but is unusual in being ten-sided rather than round and the blob top could almost be classed as a sloping-collar finish (Fig. 31d). The glass is cobalt blue and the bottle was made in a two-piece mold; the base exhibits improved pontil scars covered with white paint. The embossing, placed vertically on alternate side panels, reads "S. S.//KNICKER//BOCKER//SODA WATER// 164.18th St N.Y. 1848."

No soda manufacturer by this name was found in the New York directories. We believe that the water was bottled for use on the steamship Knickerbocker, which was built in 1843, and operated on the Hudson River for several years thereafter. In 1848, the vessel was transferred to Long Island Sound, where it ran from New York to New London and Norwich, Connecticut.[134] It is possible that the soda water bottles were made to advertise the initiation of this run.

Louis Leloy, Napa Soda

These bottles are clear aqua, apparently of patent style from a two-piece mold and embossed "NAPA/SODA/LOUIS LELOY//NATURAL/MINERAL WATER." The collection contains two broken specimens.

The length of time that Louis Leloy, a native of France, had spent in the United States before coming to California is unknown. In 1860 or 1861, Leloy arrived in Sacramento and established a barber shop on J Street between Second and Third streets.[135] By 1868, he seems to have become quite well established in the town, according to his advertisements.

> LOUIS LE LOY fashionable Hair Dresser...manufacturer of curls, braids and waterfalls. Has constantly on hand a large assortment of Human Hair, and a variety of Fancy articles.[136]

In 1879, Leloy was listed as a dealer in "cigars and tobacco," and only secondarily as proprietor of a hairdressing salon. In 1880, liquor was added to the inventory, and by 1881 his occupation as a hairdresser was entirely deleted from the listings.[137]

In 1880 or 1881, Leloy purchased the agency for Napa Soda from Phil Caduc and moved the equipment to 222 J Street (also given as 224 or 228 J Street). In 1882, Leloy was proprietor of the Sazarac Saloon, which had been established at the J Street address. From the saloon, he continued to bottle soda and mineral water, along with selling wine, liquor, and tobacco.[138]

In 1886, the Napa Soda agency reverted to 1009 J Street -- Caduc's old establishment -- being taken over by Charles Sellinger. About 1887 or 1888, Leloy died. His estate was managed by his widow, Lulu, until she and their son, Louis, Jr., moved to Oakland in 1893. The Sacramento agency for Napa Soda had been taken over by then by C. Schnerr & Co. In 1895, Louis Leloy, Jr., reappeared in Sacramento as an employee of the hardware firm of Holbrook, Merrill & Stetson; he resided at his father's business address of 222 J Street for several years, but apparently did not carry on the old business.[139]

Lippincott & Belding

These bottles are standard style, aqua 9-oz containers, made in a two-piece mold and with blob-top finishes. The only embossing is the large initials "L & B" (Fig. 40c). We have two specimens.

The firm of Lippincott & Belding was established in Stockton in April, 1857, when Charles Belding bought out the interest of A. F. Vaughn in the soda water business which Benjamin R. Lippincott and Vaughn had been running on Weber Avenue since July, 1852. The company handled syrups, bitters, and essences, as well as soda and "Congress" waters. Lippincott remained active in the company until December, 1870, when Belding bought out his partner and continued alone.[140]

Benjamin Rush Lippincott was born in Pennsylvania about 1827 and was, perhaps, the son of Benjamin S. Lippincott, who was chairman of the committee that drafted the articles of incorporation for the city of Stockton in 1850.[141] Lippincott & Belding also operated in Marysville, where Lippincott was a resident in 1867. He was still living in Marysville in 1870, but was not listed in the city directories after that year.[142]

Charles Belding was born on July 12, 1831 in Hampshire County, Massachusetts, the son of Joshua and Rosetta Colley Belding. The Belding family made their living by farming. When Charles was five years old they moved to the Wyoming Valley in Pennsylvania. Charles was educated in the district schools there, and at the age of fourteen entered Wyoming Seminary in Kingston, Pennsylvania. At sixteen he left school and went to Mauck Chunk, Pennsylvania, where he was employed by Asa Packer in the iron and steel business. After four years in Mauck Chunk, Belding left for California, arriving in San Francisco on February 24, 1852.

The following day he traveled on to Stockton, and for a time supported himself selling vegetables in the mining camps in Tuolumne County. He returned to Stockton after several months and became involved in the soda water business, in which he was destined to amass a considerable fortune. At first, he worked for the firm of Lippincott & Vaughn, but in 1855, Belding and John B. Vaughn bought a soda water factory in Murphys and went into business on their own. In the following year, however, Belding sold his interest in the business and returned temporarily to the East.[143]

By April 1857, Belding had returned to Stockton and had gone into partnership with Lippincott. By 1863, Lippincott & Belding had opened a second factory in Marysville, which was operated after 1871 by Lyman Belding, Charles' brother. Lyman was listed at times in the Marysville city directories as its proprietor. Charles appears to have reassumed ownership again by 1894. The factory was still in operation in 1903 at 218 Second Street, but it had ceased operation by 1910.[144]

Lyman Belding was also a farmer and rancher in San Joaquin County, and received national recognition as an authority on the birds of California and the Pacific coast. He provided the basic specimens for the collection of California birds in both the Smithsonian Institution and in the National Museum.[145]

According to one historian of San Joaquin County, Charles Belding always considered himself a farmer first, despite his considerable success in business. By 1890, he owned two ranches, one in San Joaquin County and one in Butte County. Wheat was the main crop on his 1,700 acres; he owned nearly a hundred prize Hambletonians, Clydesdales, and Woodworths. He was known for applying sound business practices and strict accounting to the farming enterprise, farming being for him "no chance matter."[146]

Belding's business interests extended also to the insurance industry. By 1870, he was Stockton agent for the Pacific Insurance Company of San Francisco, and in 1887, for the Home Mutual Insurance Company.[147]

Belding left his mark on the history of Stockton in his involvement in public life. A staunch Republican and "a mixer in politics," he had a political career which began in 1861 and spanned almost two decades. He held the position of school trustee in 1861 and 1862. In 1863, he was elected alderman from Stockton's first ward, served as temporary president of the city council, and at the same time held the position of public administrator of San Joaquin County.

Between 1865 and 1870, he held at various times and sometimes simultaneously the positions of public administrator of San Joaquin County, assessor of the city of Stockton, and school trustee. In 1867, he held all three positions. In 1870, Belding was again elected alderman from the first ward, while continuing his job as public administrator of the county. He held only the public administrator's job in 1870, was out of office in 1872, and then was again elected alderman from the first ward in 1873, serving at the same time as president of the city council. Belding's political career reached its apex in 1878, when he was elected mayor of Stockton.[148]

The election of 1878 was no ordinary election. The spectre of radicalism had appeared in California in the form of the Workingman's Party, and by 1878 had spread to Stockton from San Francisco. In that city, Denis Kearney had organized thousands of the unemployed into a successful political movement that some thought might sweep the state, which had been beset since the early 1870s by grave economic problems.

In order to sweep Stockton into this great tide of protest, the Kearneyites, it was claimed by a contemporary conservative newspaper's account, had subjected the city to a "colonization of tramps." Stockton's streets were filled, according to the same paper, with "vulgarity, obscenity, and profanity," and the Kearneyites "fairly disgraced the city in their hoarse harangues."

The "best" citizens of Stockton responded to this "foreign" threat and, laying aside partisan differences, organized a slate of candidates for the city elections of May 6, 1878. This ticket was called simply the "Citizen's ticket," and at its head, as candidate for mayor, was Charles Belding.

When the votes were counted, Stockton's best had won the day, taking 12 of the 13 offices at issue. With the political tide reversed, Belding served but one year in office and did not seek reelection in 1879. He did not again seek public office.[149]

During his time of public service, Belding also continued his interests in farming, soda water, and insurance. Later, he had constructed a great mansion in the Queen Anne style on El Dorado Avenue, between Park and Flora streets, into which the Belding family moved in 1885. "No expense had been spared," according to a newspaper account, in its building and furnishing.[150]

In 1895 Belding, by then perhaps thinking of his retirement, sold part interest in his soda water business to Samuel B. Huskins, and the company was known as Belding & Huskins until it ceased operations after the turn of the century. While on a hunting trip in February, 1905, Belding was taken seriously ill. He was returned to Stockton and, although a doctor was brought from Sacramento by special train to attend him, he died on February 17. His obituary echoed what a historian of San Joaquin County had written while Belding was still alive in 1890:

> The life of Charles Belding affords a noteworthy lesson to the ambitious young man. He obtained his own start in the world and by perserverance and strictly honorable means he attained a degree of success of which any man might well be proud.[151]

Belding & Huskins continued operations through the first decade of the new century. Huskins survived Belding less than two years. After his death, the firm was managed by his son, Walter B. Huskins. The firm is not mentioned in the city directories of Stockton after 1910.[152]

Litton Springs Co., Geyser Soda

All that remains of the bottle from this firm is a piece of pale aqua glass bearing the word "GEYSE[R]" in very large letters arranged in a curve. This clearly is the same variety of bottle as that illustrated by Schmeiser and by Markota and Markota, the complete label of which is "GEYSER/SODA//NATURAL/MINERAL/WATER/FROM/LITTON SPRINGS/ SONOMA CO. CAL."[153]

Lytton Geyser Soda Water was apparently first marketed under the name "Litton Springs Seltzer Water." Although it was not advertised in the San Francisco City Directory until 1876, it must have been bottled at least as early as 1875 and possibly earlier.[154]

According to a chemical analysis which was done by Henry G. Hanks of San Francisco in 1875, the water contained boracic, carbonic, hydrochloric, sulphuric, and silicic acids as well as alumina, ammonia, iron, lime, lithia, magnesia, potash, and soda. Its chemical composition explains why the water was slightly acid "when freshly drawn" but became somewhat alkaline if allowed to stand. Used as an "antacid in dyspepsia and in uric and lithic acid conditions of the urine," the water was also recommended for its "aperient and diuretic properties." The water, which was "exceedingly pleasant to the taste," according to Hanks, came from the Litton Springs, four miles north of Healdsburg in Sonoma County. For at least twenty-five years, the bottled water was sold in San Francisco.[155]

The water was distributed by E. B. Smith & Co., agents for Litton Springs Seltzer Water, at the southwest corner of New Montgomery and Mission streets from 1876 to 1879, when the office was moved to 107-1/2 Fifth Street.[156] Although the company was listed only sporadically in the San Francisco city directories during the early 1880s, the firm apparently moved to 29 New Montgomery Street in 1883 when C. Eggers became manager. The company was located at 152 New Montgomery Street between 1886 and 1893, although it had three different managers between 1886 and 1889. E. Louis Lowe, Jr., served as manager from 1889 until 1893.[157]

After Philip Kyle became manager in 1894, the company moved to 41 Second Street and the name of the firm was changed from Litton Springs to Lytton Springs Sanitarium & Mineral Water Company.[158] Since the sanitarium had not been advertised earlier in the San Francisco city directories, the change in spelling from Litton to Lytton may have been related to the development or change in ownership of the sanitarium or to a merger between the sanitarium and the mineral water company.

In 1895, the Lytton Springs Medical and Surgical Sanitarium in Sonoma County continued to have an office at 41 Second Street in San Francisco, the same address given that year for Lytton Springs Water Company, Lytton Geyser Soda, and Lytton's California Seltzer agency.[159]

By 1896, Isaac Burke had replaced E.B. Strong as manager of the mineral water company, and the following year the firm moved to 218 McAllister Street, as did the office for the Lytton Springs Sanitarium Company (A.W. Dennett, President).[160]

The sanitarium apparently opened a branch office in 1898 at 504 Kearny Street, but retained its office at 218 McAllister Street where the Lytton Springs Water Company was now supervised by William H. Bone.[161]

The heyday of the Lytton Springs Water Co., however, was apparently drawing to a close. The company, which moved again in 1899 to 33 Second Street, was not listed the following year in the city directory, although it reappeared in 1901 as the Peoples' Mineral Hygiene Company at 642 Howard Street. After 1899, neither the Lytton Springs Water Company nor Lytton Geyser Soda was listed as such in the San Francisco city directories, despite the fact that the Lytton Springs Sanitarium Co. was included until 1905.[162]

Los Angeles Soda Works

The only specimen from this firm is an 8-oz clear glass bottle of modern style, made in a two-piece mold with an applied crown finish. The side of the bottle bears the legend "LOS ANGELES/SODA WORKS" encircling an embossed star (Fig. 41). In very small letters near the base is embossed "D.O.C. 142."

Figure 41. Embossed soda water label: Los Angeles soda.

This soda factory, the first in Los Angeles, was founded in 1868 by Henry W. Stoll. Born in Germany in 1839, Stoll emigrated to Wisconsin with his parents in the early 1840s. In 1864, he moved to St. Louis and then St. Joseph, Missouri, before coming across the plains to Los Angeles in 1867.[163]

The Los Angeles Soda Works was begun by Stoll, perhaps in partnership with W.H. Huber, on a small scale in the following year. In Los Angeles' first city directory -- probably published in 1872 -- Stoll and Huber are listed as proprietors of the Los Angeles Soda Works at 13 Aliso Street. By the time of his next directory listing four years later, Stoll alone was running the soda manufactory. Except that the factory was moved to Sainsevain Street by 1879, the business seems to have continued with little change until about 1885, when Philip C. Stoll -- Henry's brother, who had been a clerk and delivery man for the business for the previous ten years -- was included as a junior partner in the new firm of H.W. Stoll & Co.[164]

The size to which the business had grown by about this time is detailed in an 1888 summary of the major industries of the city:

> If there is any one industry which is now showing forth the wonderful advancement of Los Angeles, and the many advantages and resources of this "flowery kingdom," it is the Los Angeles Soda Works, located at No. 107 Sainsevain Street, which is the largest and most important enterprise of its kind of the Pacific Coast... Their immense establishment presents a bewildering labyrinth of generators, bottling machines, reservoirs, sirup tanks, and flavoring extract distillery, that loses one in wonder as he strolls through their extensive factory. A large force of men are constantly employed, and the yearly product of this concern is something marvelous. A new engine and steam apparatus has been provided to propel the machinery of this factory, which enables them to turn off from 1000 to 1500 dozen daily, of sarsaparilla, soda, mineral water, sirups, cordials, elixir and temperance beverages... Mr. H.W. Stoll is a prominent member of the Board of Trade, as is his brother, Mr. P.C. Stoll, the junior member of the firm.[165]

The works must have been undergoing considerable expansion during this period; a year later the company's daily production claims had more than doubled to 3,000-5,000 bottles.[166]

The firm remained in business into the twentieth century, early in which the present bottle was probably made. The small letters near the base of the bottle are the initials of the D.O. Cunningham Glass Co. of Pittsburgh, which operated from 1882 to 1937.[167]

J. Monier

This is a 9-oz cobalt blue bottle of standard form. It was made in a two-piece mold and the finish -- though now broken away -- was undoubtedly a blob top. The base has an improved pontil scar covered by white paint, and the embossed label is "J. MONIER & CO/CLFRNA."

We were unable to find any reference to a California soda works or brewery operated by J. Monier & Co. The 1858 San Francisco city directory does list a Monier & Co., hairdressers, at 185 Clay Street.[168] Prior to that, Jerome Monier had been in business with H. Constant (Monier & Constant) as a hairdresser and wigmaker on Commercial Street near Montgomery Street, probably at 160-1/2 Commercial Street where the two men had lived in 1857.[169] Since Sacramento hairdresser Louis Leloy (which see) later went into the soda water business, the two trades may not have been as incompatible as they appear to us today.

J. G. Parker & Son

This is a 9-oz standard bottle of dark teal green glass, made in a two-piece mold and with a blob-top finish. It is embossed "J. G. PARKER & SON/NEW YORK." We have four specimens.

From 1840 until 1900, only one firm was listed in either the New York City or Brooklyn directories which could account for the label J. G. Parker & Son. In 1857, John G. Parker & Son were listed in the directory of New York City as merchants at 70 Cortlandt Street. This firm may have been the descendant of a firm which had begun in 1844 and was then simply listed as "J. Gilbert Parker, merchant." Joseph Gilbert Parker was listed also as a dealer in cutlery in the 1850 through 1852 New York directories; he apparently lived in England throughout most of this period.[170]

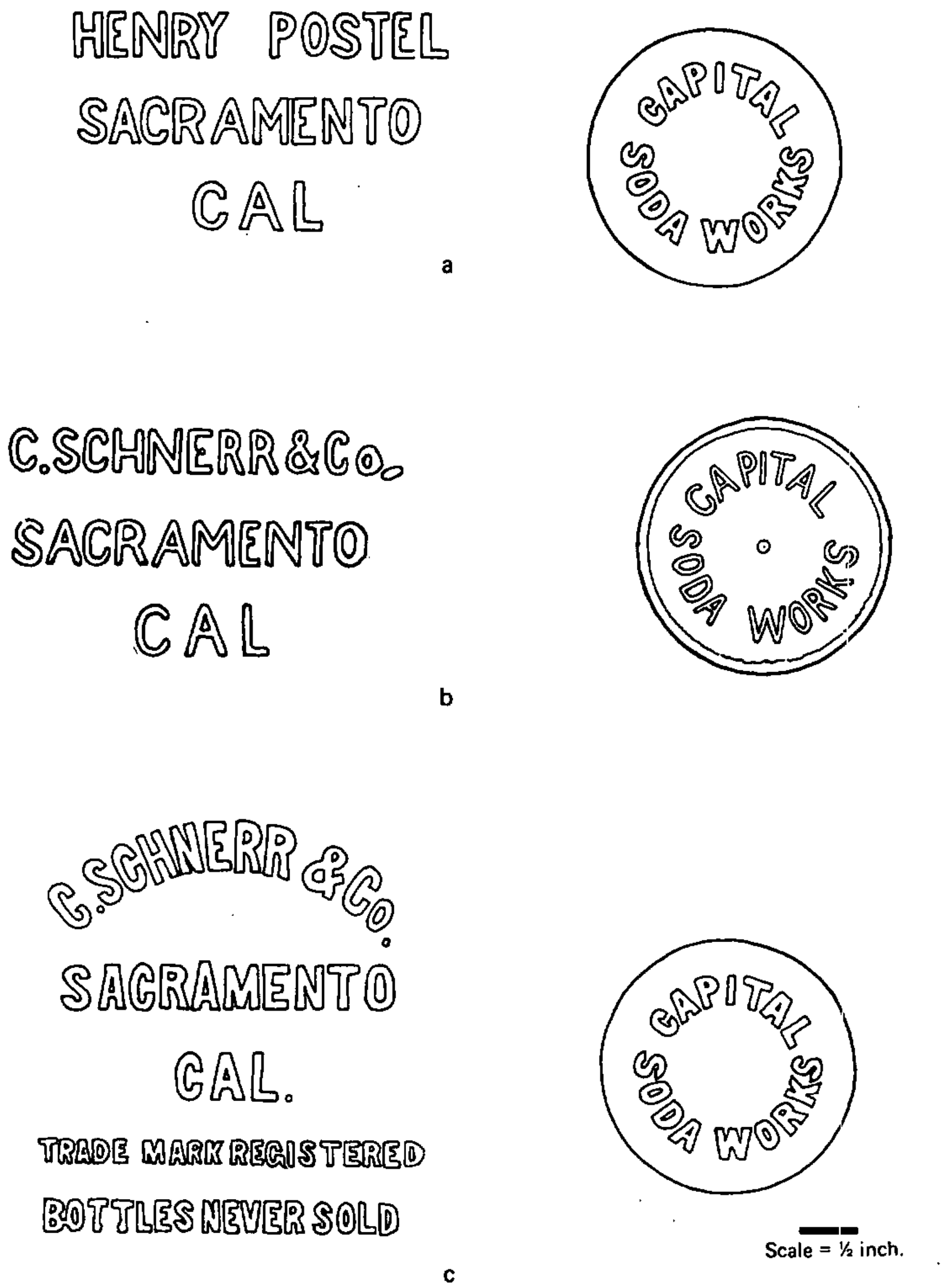


Figure 42. Embossed side and base labels from Capital Soda Works bottles: a) H. Postel; b-c) C. Schnerr.

In 1853, John G. Parker first appeared in the directories as a merchant at 226 Front Street. In 1857, J. Gilbert Parker disappeared from the listings, and John G. Parker & Son appeared. Although we have been unable to track down the firm in Illinois, the 1864 through 1866 directories listed John Parker as residing in that state. In 1868, Parker's home was listed as New Jersey, where it remained until the firm disappeared from the directory listings in 1873.[171]

Henry Postel, Capital Soda Works

Two varieties of bottles, each represented by a single specimen, comprise the collection's record of this company. The first is a pale aqua patent style bottle from a two-piece mold with a blob-top finish. The vessel is embossed "H/SAC//P" (the initials being very large Roman letters) on the sides, while the base bears the circular designation "C.S.W./SAC." The second bottle is of the same style, but is embossed "HEN[RY POST]EL/SACRAMENTO/CAL" and, in a circle on the base, "CAPITAL/SODA WORKS" (Fig. 42a).

Henry Postel was initially employed in Sacramento as a bookkeeper for the Columbus Brewery from 1879 until 1881. By 1882, he had become the proprietor of the Capital Soda Works at 308-310 J Street. From then until 1887, Postel apparently was the sole proprietor of the Capital Soda Works, although there is some evidence that William Holden (which see) must have also been involved in the operation of a soda factory of this name during the 1880s.[172]

In 1887, Postel acquired Constant Schnerr as a partner in his soda works. In the same year, Postel and Schnerr became the agents for "Friedericksburg lager bier" and moved their operation to 1113 Front Street. Apparently, Postel and Schnerr were bottling the beer, which was shipped in bulk to Sacramento from the Fredericksburg brewery in San Jose. In 1888, the firm also began to bottle mineral waters, shipped in bulk from various springs, and in the following year they ventured into the market with Postel's Phosphated Herb Lemonade.[173]

In 1891, Henry Postel left Sacramento and moved to San Francisco. Although his son, Amendes, remained in Sacramento, the Postels retained no apparent interest in the firm, and the business was thereafter styled C. Schnerr & Co. Schnerr at this time seems to have been experimenting with some unusual products of his own in the nonalcoholic beverage line; at the end of the year he trademarked labels for "Sarsaparilla, Iron and Vichy Water," and "California Orange Cider."[174] In addition to introducing new bottles with his own name blown in the glass, Schnerr apparently continued to use those made for Postel & Schnerr, and even those for Henry Postel. In 1893, he trademarked the embossing "H/SAC.//P," "C. SCHNERR & CO/SACRAMENTO/CAL," "POSTEL & SCHNERR/ SACRAMENTO/CAL," "HENRY J. POSTEL/SACRAMENTO/CAL," and "NATURAL MINERAL WATER/C. SCHNERR & CO/SACRAMENTO/SOLE BOTTLERS." The application also included the basal embossing "C.S.W./SAC" and "CAPITAL SODA WORKS." The company was then still acting as agents for Fredericksburg Beer, and also for Jackson's Napa Soda, and was still making Orange Cider and ironized Vichy sarsaparilla.[175]

Shortly thereafter, Constant Schnerr, Sr., turned the operation of the Capital Soda Works over to his sons, Constant, Jr., and Edward, who inherited the firm upon their father's death, October 24, 1897.[176] From 1897 until 1911, Constant Schnerr & Co. continued to operate under the leadership of Schnerr's sons, although the Capital Soda Works apparently ceased to function around 1909, when it was last listed in the directories. In 1913, Constant, Jr., went to work for Shasta-Aristo Company, the predecessor to the modern Shasta Beverage Company.[177]

Martin Rancich

Bottles of this manufacturer are cobalt blue, of standard style, made in a two-piece mold, held 9 oz, and have blob-top finishes. The bases are painted white over a bare-iron pontil mark. One side is embossed "M.R./SACRAMENTO" (Fig. 31a). Three specimens are present in the collections.

Martin Rancich was born sometime between 1813 and 1822; it seems likely that he was a Slovene from one of the northern Italian provinces which had been incorporated into the Austro-Hungarian Empire. He emigrated to the United States and lived in Pennsylvania prior to answering the call of the gold fields. The first public record of Rancich in California is in the 1850 census, where he is listed as Martin Rancher.[178]

Rancich is said to have "started another [soda manufactory], having a capacity of one hundred and fifty dozen [bottles per day]," in 1850.[179] The Sacramento city directories, however, did not list Rancich until the following year, when he appeared as a grocer at 135 J Street. This store was destroyed (with a loss of $3,000) in the great conflagration of November, 1852, but in the following year, Rancich was back in business, listed as primarily a liquor merchant, this time at 131 J Street.[180] By 1854, he was noted as a soda manufacturer, indicating that this trade had become his primary concern. The new enterprise received a blow when his soda factory, on the north side of J Street between Fifth and Sixth streets, was destroyed in another great fire on July 13, 1854.[181] The setback, however, was only temporary.

Rancich continued in business as a soda manufacturer for at least the next twelve years at his establishment on Fifth Street near J Street. The 1860 census gave some indication of the size of his soda business. By that time, Rancich had $800 invested in the equipment necessary for the operation, and the raw materials on hand were worth $200. He employed one male worker whom he paid $75 per month. The factory produced 2,000 doz bottles of soda water annually, which were valued at $1,000, or about 4¢ per bottle. Presumably this evaluation reflects the cost of production rather than the retail value.[182]

It has generally been assumed that the "M.R." monogram was in use on Rancich's bottles during the 1850s.[183] This, however, is in some doubt. When the enabling legislation was passed in 1861 to set up a state trademark system, Rancich rushed to register not his initials but the use of white and green paint on his bottle bases.[184] He may have used embossed bottles earlier and found painting plain vessels less expensive, but in view of his definite use of embossed labels later in the decade, this cannot safely be assumed without further evidence.

About 1862 or 1863, Rancich seems to have taken into partnership Gaetano Deluchi, who had been a laborer in his soda works since 1857. The directories do not explicitly mention this partnership, although Deluchi in 1863 is included as a "soda manufacturer." The presence in private collections of soda bottles embossed "M.R. & D." would seem to confirm the existence of the association.[185] The fate of this partnership is unclear, as after 1864 neither Deluchi nor Rancich had an occupation listed beside his name. Until 1870, both Rancich and Deluchi continued to reside at 19 Fifth Street, where the soda water factory had previously been located. In 1870, Deluchi became a "general agent, [at] 47 5th St. bet[ween] J and K," and Rancich was the proprietor of the Central Restaurant, located in the Hamilton Building on K Street. Rancich continued as proprietor of the restaurant until 1874; no listing was available for him after that year.[186]

Sacramento Co-Operative Natural Mineral Water Association

The two bottles from this enterprise are clear 8-oz or 9-oz modern soda style containers, made in a four-piece mold, with an applied crown finish. The face is embossed "S.C.O.N.M.W. ASS'N/SACRAMENTO, CAL." (Fig. 40e).

The earliest available listing for the Sacramento Co-Operative Natural Mineral Water Association was found in a Sacramento telephone directory of January 1, 1901, which should indicate that the organization was founded in 1900. The S.C.O.N.M.W.A. was organized with John Haub as its president and Martin J. Gastman as the vice-president, maintaining offices at 903 Front Street. Haub and Gastman, in October, 1901, registered the S.C.O.N.M.W. label of the present bottles as a trademark. In 1902, John Haub was proprietor of the Pabst Cafe and Sacramento agent for Rainier and Pabst Milwaukee beers. Martin Gastman was a tavern proprietor.[187]

The co-operative remained in operation only a few years and was last listed in 1907. Haub and Gastman probably continued as the major investors in the firm, although after 1902 no direct evidence was available regarding those involved in the firm's operation. During its brief tenure, the co-operative was primarily engaged in bottling Castle Rock mineral water for the Sacramento trade. In 1902, and again in 1907, the firm was listed as "bottlers of Castle Rock mineral water." This water was only distributed among the Sacramento businesses during those years the S.C.O.N.M.W.A. was in operation, although it was bottled and sold elsewhere in the state.[188]

C. Schnerr & Co., Capital Soda Works

We have two varieties of bottles from this company. The first (two specimens) is of pale aqua glass, made in a two-piece mold. It is made in patent style, with a blob-top finish, and one specimen has a Hutchinson stopper. The sides are embossed "C. SCHNERR & CO./SACRAMENTO/CAL" and the base "CAPITAL/SODA WORKS" (Fig. 42b).

The second variety is of modern soda style, also made in a two-piece mold, but with an applied crown finish. The glass is extremely pale aqua (almost clear). The basal embossing is identical, but the side is embossed "C. SCHNERR & CO./ SACRAMENTO/CAL./TRADEMARK REGISTERED/BOTTLES NEVER SOLD" (Fig. 42c). We have one specimen.

C. Schnerr & Co. were bottling soda from 1891 until about 1909. The trademark was registered in 1893 (see Henry Postel).

Sunrise Soda

Only a single, very late bottle is present in the collection to represent this product. It is machine made, of clear glass, and in a modern soda bottle style with a crown finish. One face is embossed "SUN-RISE-SODA-WORKS/SACRAMENTO" around a rising-sun design (Fig. 40f). On the opposite side, near the base, is embossed "NET CONTENTS 8 OZ." The method of manufacture clearly places production of this bottle in the twentieth century; the embossed volume presumably dates it after the 1915 law which required this information.

The origins of the Sunrise Soda Works will probably remain hidden in the vast historical recesses created by American racism. S. Tokunaga, owner of this enterprise, was of Japanese ancestry and therefore, in the light of American opinion at the turn of the century, was considered unfit for inclusion in the Sacramento city directories. Although Tokunaga was excluded from this reference until after 1918, the Sunrise Soda Works was listed in the 1908 Sacramento telephone directory as operating from 317-1/2 M Street.[189] How much earlier Tokunaga established the firm is unclear.

Sunrise Soda Works remained at 317-1/2 M Street until approximately 1918, when the telephone directories began to list the address as 82 Jap Alley. Since Jap Alley ran between L and M streets, it is likely that the two addresses refer to the same location. After 1918, the city directories continued to list Sunrise Soda at the M Street address, while the telephone directories listed Jap Alley. An advertisement from the 1926 "Yellow Pages" under bottling establishments listed "Sunrise Soda Works, soda water and beverages, wholesale and retail." A similar advertisement in 1928 gave a better indication of the products the firm dealt in, specifying, "Rainier, Buffalo, Tacoma Beer, Soda Water and Beverages, [and] all flavors of syrups." After 1935, Sunrise Soda was no longer listed in the Sacramento directories, nor was S. Tokunaga.[190]

Treacher (?) & Co.

Two broken examples of this pale green, torpedo style bottle are available. Made in a two-piece mold, they are embossed "SUPERIOR/AERAT[ED WATER]S/ MA[NU]FA[CTUR]ED BY/TREA[C?]HER & C^{O}/CHEMISTS/BOMBAY." Neither specimen retains the finish (Fig. 43).

We have no information on the company.

James P. Tryner

An isolated import from the Atlantic Coast, this aqua 9-oz bottle is somewhat squat but otherwise of standard shape. It was blown in a two-piece mold and has a blob-top finish and a bare-iron-pontil-scarred base. The embossed label is "J.P.T./ 525 HOUSTEN ST/N.Y.//XXX" (Fig. 44).

James P. Tryner began bottling soda and mineral waters at 7 Elm Street, New York City in 1848 or 1849. In 1854, he moved his operation to "525, 527, and 531 Houston Street" and took in a partner.[191] From then until 1859, the firm was styled Tryner & Hillier, and continued to bottle and sell soda and mineral waters. In 1860, after the dissolution of his partnership with Hillier, Tryner moved his bottling business to 146 E. Houston Street, where he remained until his tenure as a New York bottler ended in 1862. In 1864, a laborer named James Tryner appeared in the directory, but he was listed for that year only. Two years later, Sarah Tryner was listed as the widow of James P. Tryner. Subsequent to the final mention of Sarah in 1869, no further listings for either Tryner appeared in New York.[192]

Union Soda Works

Another lone pale aqua, patent style bottle from a two-piece mold, this 8-oz or 9-oz container has a blob-top finish and rusted but intact Hutchinson-style stopper. The only embossing is that on the base: "U.S.W./SAC."

The style of this bottle would seem too recent for the 1860s Union Soda Works of E. L. Billings. It probably derives from the soda factory of Holden and Kuhn, which operated in Sacramento in 1884. The firm's history is briefly recounted under Holden's Ginger Ale.

Vartray Ginger Ale

This 10-oz aqua straight-sided, round-based bottle was made in a two-piece mold and has an applied crown finish. The shoulder is embossed in small letters "VARTRAY/REG'D," while the base bears the equally diminutive legend "EHE CO."

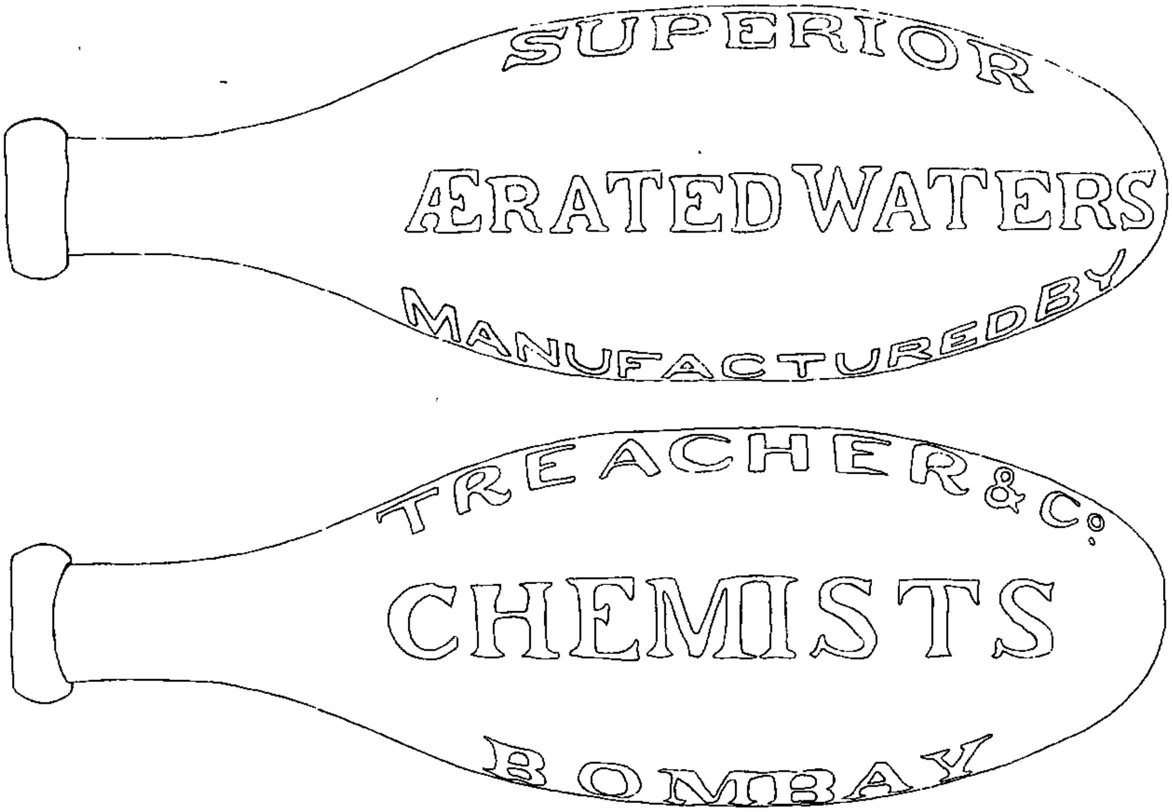
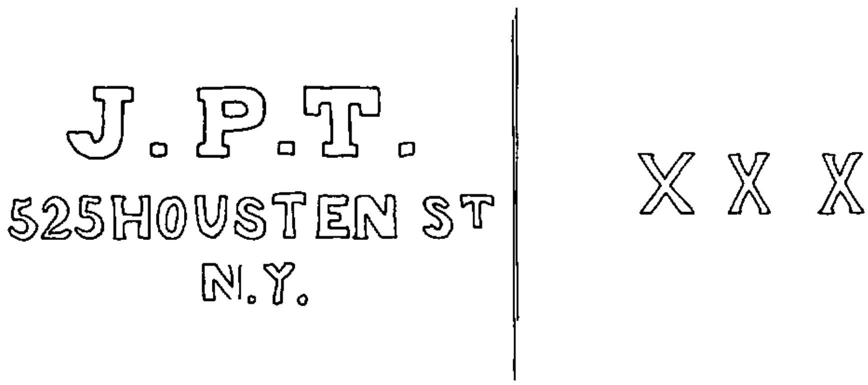


Figure 43. Hamilton style soda bottles (reconstructed): Trea[c]her & Co.



Scale = ½ inch.

Figure 44. Embossed soda water label: J.P. Tryner.

This bottle was located too late for detailed research. The soda was made by the Vartray Water Co. of Buffalo and won an award at the Paris Exposition of 1900. At the beginning of this century, the company's advertising still showed a bottle with a sloping-collar finish; if this depiction was up-to-date, the present bottle must be a twentieth-century container.[193]

Veronica Mineral Water

This dark amber 44-oz bottle is square with rounded edges. Made in a two-piece mold, it has a flared-lip finish and the legend "VERONICA MINERAL WATER" embossed in a circle around the shoulder (Fig. 45). The collection contains one specimen.

The brand was registered in July, 1893, by Veronica Mineral Water Co. of Santa Barbara, who claimed they had been using it as a trademark for six months. The company consisted of T. S. Howley, W. A. Howley, and Henry Clifton. By the end of the century, the company had changed its name to Veronica Medicinal Springs Water Co. and was marketing mineral salts as well as water.[194] They were advertising mineral water in bottles of this style as late as 1904, and Veronica Water was still on the market as late as 1919. How long thereafter the company remained in business we have not determined.[195]

Walter's Napa Soda

The single bottle for this product is a pale aqua 8-oz container of modern form, made from a two-piece mold with an applied crown finish. It is embossed "WALTER'S/NAPA/TRADEMARK/COUNTY/SODA" around a horseshoe, while blown in the other side is "MINERAL WATER/FROM/WALTER'S/SODA/SPRINGS."

This bottle was found too late for detailed research. The springs were located in Pope Valley, in northeastern Napa County, and were discovered by Gustav Walter, who was reported, late in 1885, to be "importing from the east all the requisite apparatus for bottling of the water, which will shortly be put upon the market extensively." It seems to have been bottled by Walter from 1886 to 1894. The spring was leased in 1895 by Samuel Phillips, who changed the name of the product to Phillip's Napa Mineral Water in 1899.[196]

Williams & Severance

Another lone specimen, this cobalt blue, 8-oz or 9-oz bottle is of standard form, blown in a two-piece mold. The finish has been broken away, but the base shows a bare-iron pontil scar. The vessel is embossed "WILLIAMS/& SEVERANCE/SAN FRANCISCO/CAL//SODA &/MINERAL/WATERS" (Fig. 46a).

Williams & Severance were soda and mineral water manufacturers during San Francisco's early years. The 1850 San Francisco directory listed a Louis Williams, seaman. It is possible that this listing referred to one of the proprietors of Williams & Severance who was listed in 1852 and thereafter as Lewis Williams. In 1852, the firm of Williams & Severance made its first appearance in the city directories, indicating that the firm had probably been established in the preceding year. Henry Severance and Lewis Williams were listed only in the 1852-53 San Francisco directory. In 1854, Luther Severance and Lewellyn Williams were listed as the proprietors of the Williams & Severance soda water factory on Vallejo Street between Dupont and Stockton streets. After 1854, neither man was among those listed in the directories, and the firm of Williams & Severance abruptly disappeared. Although no trace of either Henry or Luther Severance could be found, Lewellyn Williams did reappear in Sacramento in business as a flour dealer until his death in 1891.[197]

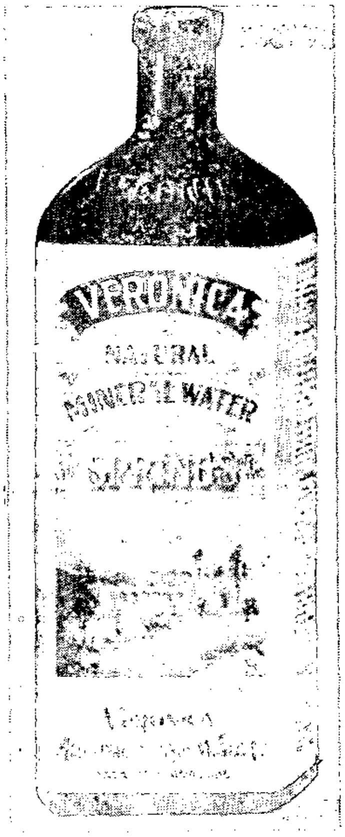


Figure 45. Veronica water bottle as depicted in an early ad (*Pacific Wine and Spirit Review* May 31, 1903. California State Library).

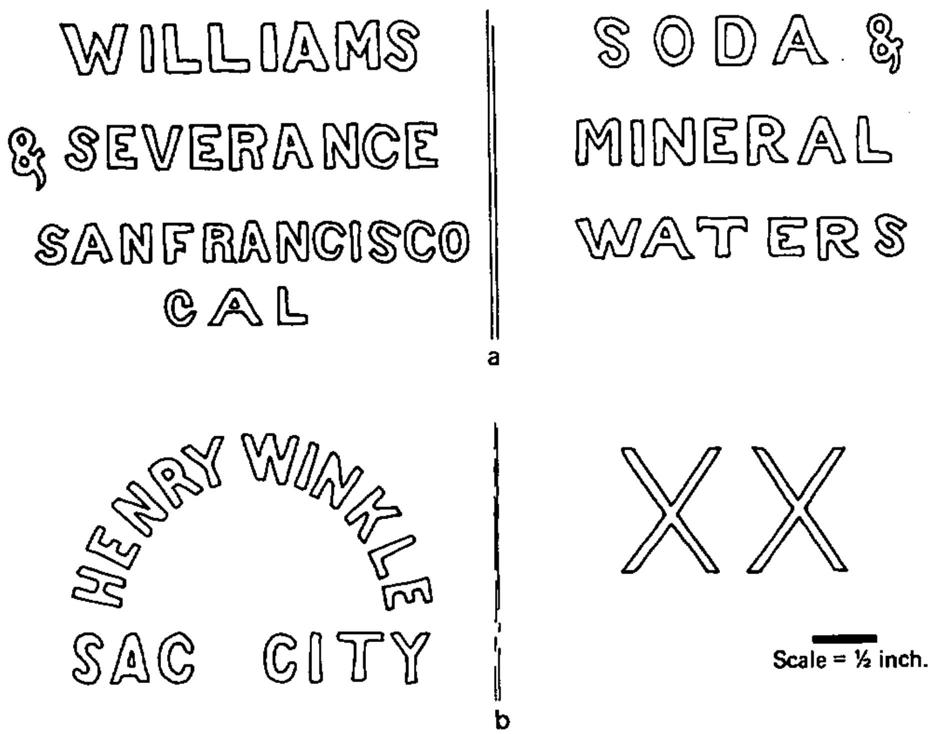


Figure 46. Embossed soda water labels: a) Williams & Severance; b) Henry Winkle.

Henry Winkle

The two representatives of this ill-fated enterprise are 8-oz aqua bottles of standard shape, from a two-piece mold. The finish is broken away on both bottles (though it was undoubtedly a blob top), but the bases exhibit bare-iron pontil scars painted over in white. The vessels are embossed "HENRY WINKLE/SAC CITY//XX" (Fig. 46b).

Henry Winkle's tenure among the Sacramento business community was short-lived, lasting no more than four years before he left for San Francisco. He was born in Germany on March 10, 1821, and emigrated to New York in 1840. Over the next ten years he practiced his calling as a baker in the South until, in 1849, he left for Californa via the Isthmus of Panama. Arriving in San Francisco in March, 1850, Winkle quickly moved to Sacramento where he again established himself as a baker at 16 K Street.[198] Advertisements for the period give no indication that he had begun to bottle soda water, listing only

> Winkle's Bakery, of Pickwick Memory. A daily supply of fresh bread, pies and cakes, for hotels and families. Fancy and iced cakes and confectionery, always an [sic] hand. ALSO--Hot coffee and tea, oysters, ducks, ham, and &c., furnished at short notice. Call and judge for yourselves, at No. 16 K Street, between Front and 2d.[199]

On November 2, 1852, a great fire broke out in Sacramento, engulfing seven-eights of the city, and Winkle's bakery was one of the establishments that succumbed to the devastation. By December 1, 1852, Winkle had already reestablished himself in a new brick building, on K Street between Front and Second streets, near his previous location. He did not content himself with rebuilding but also built a second brick structure. Each structure measured 20-by-65 ft, and each was built at a cost of $4,500.[200]

In late December, 1852, and extending into January of the following year, Sacramento was again devastated by the forces of nature. Following a period of extremely severe rains, the Sacramento River overflowed its banks and flooded the city. Located near the banks of the river, Henry Winkle would have been one of the first businessmen to have had his establishment inundated. Winkle again rebounded from disaster -- or attempted to -- and it is noteworthy that his post-flood advertisements contain our only explicit reference to his soda manufactory:

> Winkle & Cohner, Soda Water Manufacturers, Front street above I near the Slough, would inform their old patrons that they have just received an extensive supply of new bottles and stock of materials for the manufacture of soda and are prepared to supply all with a superior article in any quantity and at the shortest notice.[201]

We infer, however, that the attempt to recoup the redoubled losses was only partly successful. Winkle remained in Sacramento long enough to be included in the 1853-54 city directory, but he apparently terminated all his Sacramento enterprises shortly thereafter, leaving the city for the greener pastures of San Francisco. Although Winkle maintained his ownership of the two buildings on K Street, by November 1, 1854, these premises were listed as vacant. In 1854, Winkle established the "Winkle Bakery" on Vallejo and Battery streets in San Francisco and began a very profitable enterprise which lasted until 1871. Subsequently, he became involved in the wine and liquor business in San Francisco, but there was no further indication that he was engaged in the bottling of either soda or mineral waters.[202]

After Winkle left Sacramento, Winkle's Bakery came under the proprietorship of Lehman & Co., a firm owned by William Lehman. In 1855, Lehman & Co. were listed as the proprietors of "Winkle's Bakery," which had been moved to 22 J Street, and in the following year was renamed the "Pioneer Bakery." Whether Winkle maintained any interest in either the bakery or his buildings on K Street after leaving the city we do not know.[203]

Endnotes

1. Meeks 1979:6.

2. James 1889:129-133.

3. Hatch 1880:29-30.

4. This distinction between natural "mineral water" and artificial "soda water" was generally adhered to during the nineteenth century. Readers should note, however, that waters from some mineral springs (e.g., Napa Soda Springs, Litton Geyser Springs) were termed soda water, and no attempt will be made here to correct that usage.

5. Riley 1958.

6. Cf. Riley 1958; Ure 1839, II:1155; Goodholme 1882:496; Sacramento Bee Aug. 4, 1857:3.

7. Hittell 1882:571-572. Note however, that most soda water bottles were half-pints rather than pints.

8. Seger 1902:809-817; Heinz Karl Fischer, Birresborner Phonix Sprudel, personal communication.

9. Heinz Karl Fischer, personal communication; Pacific Wine and Spirit Review Jan. 31, 1905:38.

10. The Fort Ross Collection contains a complete specimen.

11. Encyclopaedia Britannica 1771, Vol. 3:577.

12. Cf. Life May 6, 1886:266; Goldberg, Bowen & Co's Monthly Price Current July, 1900:15, Jan., 1902:15; The Master Grocer (Goldberg, Bowen & Co.) Summer, 1914:57.

13. Rees 1819.

14. Putnam 1968:42; Cobb, Bates & Yerxa 1893:28.

15. McNulty 1971:110.

16. Wills 1974:Plate 6a.

17. For a succinct and lucid review of the plethora of closures developed in the nineteenth century, see Lief (1965). The Hutchinson stopper, which consisted of a rubber gasket mounted on a heavy loop of wire, was the dominant style of closure on American soda bottles in the last two decades of the nineteenth century. It was invented in 1879. The Matthews stopper was a similar device which employed a glass rod rather than a wire loop. It was advertised as being invented in 1864, but since Matthews' trade catalogs at least as late as 1870 (Matthews 1870) fail to mention it, it may not have been marketed until the success of the Hutchinson device created a market favorable to new closures.

18. For an illustration of a complete bottle, see Markota and Markota 1971:4.

19. Parker 1852:33; Rivers 1854:21.

20. Schmeiser 1968:110.

21. For an illustration of a complete bottle, see Schmeiser 1968:105.

22. Hearne and Hearne 1853:42, 1854:35; Smith 1854:39; Henderson 1856:16.

23. Rode 1850-1851:36, 1852-1853:501; Trow 1853:11, 51, 1857:57, 330; Trow City Directory 1886:100.

24. California State Archives, Trademark Application No. 3062, filed July 31, 1897.

25. Langley 1878:667, 854.

26. Langley 1873:577, 1874:625, 1877:813; Francis, Valentine & Co. 1881:886, 1884:1025.

27. Francis, Valentine & Co. 1888:1109; Wilbur 1893:1324; Painter 1895:1405; Crocker Co. 1897:1478, 1920:1484.

28. California Census of 1852, Vol. V, Counties of San Diego and Sacramento, copied under auspices of the Daughters of the American Revolution 1935:177; Colville 1853:9, 76. During the intervening years, the partnerships with which Billings was associated were styled Billings and Thomas, Billings & Norton, Billings and Bryant, and Billings & Casey, respectively.

29. Markota and Markota 1971:6.

30. Crocker & Co. 1866:177, 1868:83, 237, 241; California State Archives, Trademark Application No. 170, filed May 17, 1870.

31. U.S. Census (1870), "Products of Industry in First Ward in Sacramento...Statistics," p. 4; U.S. Census (1880), "Products of Industry in Sacramento...June 1, 1879 to May 31, 1880," in "Partial Schedules for California," Vol. IV, "Manufacturers," p. 7; Crocker & Co. 1873:159; Hittell 1882:77.

32. Crocker & Co. 1874:64; Markota and Markota 1971:6.

33. Pacific Press 1882:33; Crocker & Co. 1885-1886:113, 1891-1892:124; California State Archives, Trademark Application No. 2075, filed Dec. 16, 1891.

34. Husted 1892:126.

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37. Schmeiser 1968:115.

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39. Complete bottles are illustrated by Schmeiser (1968:39) and Markota and Markota (1971:6).

40. Thompson and West 1880:156; California Census of 1852, Vol. V, Counties of San Diego and Sacramento, copied under the auspices of the Daughters of the American Revolution 1935:91.

41. Daily Democratic State Journal Jan. 28, 1853:3.

42. Daily Alta California Dec. 28, 1853:1.

43. Crocker & Co. 1861:11; U.S. Census (1860), "Products of Industry in 2nd District in the County of Sacramento," in "Partial Schedules for California," Vol. 1, p. 1.

44. Langley 1861:86, 1862:89, 1863:86, 1864:90.

45. Sullivan 1888:197.

46. Kimball 1850:133, 139; Sullivan 1888:197; Barry and Patton 1947:60-61.

47. Colville 1856:20, 48, 51; Itogawa 1974.

48. Sacramento Daily Democrat State Journal July 9, 1856:2.

49. According to Bancroft (1952:38) the Sitka Ice Company had been "netting a clear profit of about $75 per ton" until railroad construction made a large-scale Sierra ice industry feasible. The estimated savings to San Francisco consumers thereafter was $600,000 annually.

50. Irwin 1857:frontispiece; Sacramento Bee March 21, 1859:3.

51. Sacramento Bee June 9, 1859:2, June 10, 1859:2, Aug. 5, 1861:2.

52. Sacramento Bee Sept. 16, 1861:2; California State Archives, Trademark Application No. 4, filed Sept. 16, 1861. Ads for the painted bottles ran intermittently through Oct. 2, 1862.

53. Langley 1867a:116. Cf. Sullivan 1888:197; Sacramento Bee May 4, 1861:3.

54. McKenney 1870:2. The earliest mention of embossed bottles in Caduc's newspaper ads was at the beginning of the same year (Sacramento Union Jan. 1, 1870:5). Given a period of at least a few months to replace the old containers, the embossed bottles must have been in circulation by 1869. Dr. J. H. Wood, who then owned Napa Soda Springs, advertised in San Francisco in 1865 that bottles for the water were embossed on one side "NAPA SODA" and on the other "NATURAL MINERAL WATER" (Langley 1865:cxi), but whether the same precaution was then being taken at the Sacramento agency, we do not know.

55. California State Archives, Trademark Application No. 214, filed Nov. 4, 1871; Hittell 1882:572.

56. Crocker & Co. 1881:113; Pacific Press 1882:223.

57. Francis, Valentine & Co. 1881:200 and annually thereafter; Sullivan 1888:197. San Francisco Morning Call Jan. 3, 1892:7; San Francisco Chronicle Dec. 22, 1902:12.

58. San Francisco Chronicle Dec. 22, 1902:12; Dec. 28, 1902:22; San Francisco Call April 22, 1904:9.

59. Irwin 1857:54. Thompson and West (1880) claim that Casey and Kelly "commenced in 1852." No directory prior to 1857, however, lists either man, although it is possible they entered into business in some other nearby community prior to their move to Sacramento.

60. Taylor 1858:10, 40, 86; U.S. Census (1860), "Products of Industry in First Ward in Sacramento..." in "Partial Schedules for California," Vol. I, p. 2.

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62. Crocker & Co. 1868:93, 1869:39, 51, 1873:187.

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68. Crocker Co. 1905a:151, 297; Sacramento Directory Co. 1910:133.

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71. Markota and Markota 1971:12; Bogardus 1856:63; Gazlay 1864:363.

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75. Bradley 1975:84.

76. Allen 1866:56-57; Waller 1966:131-132; Bradley 1975:84-89.

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79. Allen 1866:56; Rode 1852:107.

80. Cf. Henry Johnson & Co. ad, Daily Alta California July 6, 1853:1; Goldberg, Bowen & Co's Price Current July 1, 1891:16.

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CHS	California Historical Society, San Francisco.
CSL	California State Library, Sacramento.
DPL	Denver Public Library.
HU	Baker Library, Harvard University.
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