A Look at the Possible Origins of Glassware at Liberty Hall between 1970 and 1830: A Hypothesis of the South Jersey-type Glass Factory

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Pledged in Full: Arthur S. Cooper
Introduction

The overall purpose of this paper is to provide an indepth look at the possible origin of glass artifacts that have been found by intensive extensive at the Liberty Hall site. It is also to provide, for an individual who possesses more technology and expertise than myself in dating and identifying glassware artifacts, some information that will prove helpful in tracing the origin of the glassware used by the individuals who inhabited the area and the manufacturer of that tableware. Also, I hope that this paper will shed some light onto the shape, size, color, and composition of the glassware of the period between 1730 and 1830.

It must be kept in mind that I am not making a definitive statement that the glassware used here during the eighteenth century was of a particular manufacturer or of a specific origin, but that I am presenting a hypothesis as to its possible origin. It is virtually impossible to give an accurate answer to the question as to who or when a certain glass fragment or pattern was made. For this reason, and the fact that very little glassware has been collected in good enough condition before the 1800's, one can only approximate and hypothesize about its origin and maker. Therefore, I shall attempt to put forth the evidence of major manufacturers in America at this time, and give my own educated guess, after reading and researching the as to where this glass may have come from and the types of
I shall examine the success and failure of American glasshouses and their ability to copy and imitate the quality of the European glassmakers. I shall try and present the reasons for the success and failures of various glasshouses that sprung up in America around the 1800's. (Toyo Eiyo = Beginning of Text)

The art and industry of glassmaking is a very important aspect of America's history. This process was the first industry to be carried from Europe to America, and the first to be transplanted in the New World as a result of the Spanish conquerers. Glassmaking's emergence from Europe as an industry and art coincides with the successful development of the United States.

The first glass "factory" set up in the Colonies was at Jamestown, Virginia, in 1608 by The London Company of Virginia. These first glassmakers were "eight Dutchmen and Poles" who used the techniques of glassmaking that was developed many centuries ago. The specific use of this glasshouse was the manufacturing of "glasses" and beads for export to England and then to Europe. As a result of the trying times and hazardous weather, the company failed in 1609. A second attempt to establish a more carefully planned company was attempted in 1621, but this also failed. As a result, there is little known American glass for more than a century after Jamestown; however, intensive excavation of the site has shown that glass was melted in large amounts.
So, successful American glassmaking is credited to trained craftsmen from Europe and specifically Italy, Germany, France, and England. Caspar Wistar, the founder of the earliest successful glasshouse in America in 1739, is credited with beginning the "real history of American glass" in the eighteenth century.

Wistar came to Philadelphia from Germany, bringing with him the knowledge of making brass buttons and various bottles and window glass. He also was responsible for bringing four expert glass blowers from Germany who proceeded to make their art a profitable business in the New World. This development is so important to the evolution of American glass because of the creation of a type of glass known today as South Jersey-type glass. The demise of this particular glasshouse, and many others, was caused by the Revolution. The war brought on a depression to the glass business and caused financial failure to the Wistar enterprise in 1780.

Jacob Stenger, who worked in the Wistar's glasshouse, started the second South Jersey glassworks and proceeded to use the same methods, form, color, and decorations as his employer. The glass blowers of these glass shops also used the Venetian technique of blowing glass and thus produced a type of early American glass that makes distinguishing early and late pieces difficult. Therefore, distinction between early and late Jersey glass must be done carefully. Also, when dating the artifacts, one must be aware that the experts
consider "early" dates as those referring to the "type, pattern, decorative technique, and quality of glass, rather than to the date." 5

The recognizable composition of this South New Jersey region glass is the presence of silica, potash, soda, and lime. Other glass of this period would be different in composition and shaping or blowing technique. The South Jersey-type glass also is notable by the use of colored loopings or threads of glass of one or more colors placed on a different colored glass background. In distinguishing this type from New York glasshouse ware, we see that New Jersey glass possessed the characteristics of contrasting color.

Also, with respect to various colors of glass found at the Liberty Hall site, New Jersey glass was generally made of green and olive tones. In my experiences this spring, I saw many glass fragments that were both green and olive in color. There also came up several glass bottle-necks that were free-blown. Allowing me to make this possible correlation is the fact that these pieces were also undecorated pointing to the characteristics of manufactured Jersey glass.

Through the success of the South Jersey glass, and the improvements in techniques, flint glass evolved. The first successful flint glass house in America was founded in Pittsburgh, in 1808. 6 However, the success of this glass-house is overshadowed by the New England Glass Company of Cambridge, Massachusetts (1818-1888). The glass manufacturers
of this period concentrated on making window glass, bottles, and large quantities of blown and pressed glass. The advent of this successful method of making glass was made possible by a great figure in American glass, Henry William Stiegal.

Henry Stiegal came to Philadelphia from Germany and set up his first glasshouse there in 1763. He specialized in making a fine-grade flint glass that became known as the distinctive glassware called "Stiegal." Stiegal built himself a very profitable business that specialized in decorated and colored glassware, but the depression caused by the approaching war brought failure to him in 1774. Though few pieces can be directly attributed to Stiegal's glasshouse, he is responsible for beginning a tradition.

This tradition was built on competition with European makers of table glassware, and he imitated the English and Continental style so well that distinction between American Stiegal and European glassware is virtually impossible.

In comparing the style of Stiegal glass to South Jersey glass we see that Stiegal glass is characterized by extrinsic decoration and technique that involves English and German decorative methods. This is also in contrast, as far as I know, to the major portion of glass found at Liberty Hall with regard to the late 1700's and early 1800's. Stiegal, like several of the American glass makers of the day, did not invent the type of glass he made, but like the Jersey craftsmen, he sought to make the same kind of glass that was being
imported into America from Europe. As a result, the American people began to want American made products and not European goods.

There existed a strong sentiment, until 1807, that European glass was better than that made in America. However, at the time of the blockade of England and France by the American people, American made products became preferred. The patriotic feelings of the time caused Americans to align their feelings with American made products and boycott foreign goods. This patriotic fervor seems to coincide with the naming of Liberty Hall at that time. This leads me to speculate that possibly and most probably the glassware was of American origin and not European export.

As a result of these actions, coupled with a great demand for glass and a growing industrial society, glass manufacturing began to flourish and prosper in America. Also, the development of the club life (unique only in America), rapid economic growth of the middle class, and many pubs and taverns caused more than forty-four glasshouses to be built between 1808 and 1814 in the United States. Another factor that caused this great expansion of glasshouses in such a short time was the problem of transportation. Since the roads in America were not as good as those in Europe, the shipping of glassware was more hazardous, causing the number of glasshouses to grow to accommodate the American cultural practice of throwing away bottles. This practice was not employed by the Europeans, so the necessity of bottle containers was proportionally larger than that in Europe.
The houses of glassmaking that were able to survive the 1790's and the financial depression following the War of 1812 were few in number. However, another rapid boom in glassware was caused by the false prosperity before the war and the wide employment of special sales agents, broad advertising, and the compromise of tariff regulations by 1824. Also aiding the rising occurrence of British glassware and American glassware was the Treaty of Ghent which lifted the blockade toward England, and allowed the British manufacturers to send shiploads to the U.S. shores in great quantity. However, this causes speculation that the late period glassware may have been that of English glasshouses and this makes identification even harder.

In 1820 there were more than forty glasshouses in operation in the United States. Seven of these were located in West Virginia while the others were scattered about the northern Midwest. This is significant to the possible interpretation of the glassware used at Liberty Hall for two reasons. First, a major portion of these glasshouses (25) concentrated on the manufacturing of tableware for the home and commercial use; and second, these houses also used basically the same technique as that used in making the South Jersey-type glass. As stated above, the American glasshouses produced little more than simple, though good, copies and imitations of European glasses. The American glass was well crafted and made up of handsome combinations of various decorative devices.
and traditions, but it was simply of a lesser quality. In 1830, however, there occurred a change in this pattern.

The causes of this change were more sophisticated technique which resulted in the production of fine lead glass, the use of the full-size incised mold, and ultimately the pressing machine.

The leader of this technique was the glasshouse Bakewell who was the first to use coal for heating the glass. It is very unlikely, however, that the glassware used here was out of this particular glasshouse, because Bakewell glass was very sophisticated. This glass was made by glass cutting--not blowing--and Bakewell specialized in producing lead glass tumblers with elaborate designs and figures.

There does exist, however, one company that may have possibly been in competition with the South Jersey glasshouses for supplying the glass used at Liberty Hall. This house was the New England Glass Company, founded in 1818, making it possibly responsible for the "late" glass found at the site. This factory maintained high standards and was famous for its very good free-blown glass. However, the New England Glass Company also dealt in mechanically pressed glass which would make the dating of this glass of a later period and make it recognizable as not being free-blown glass.

There also existed the method, but only for a short period, of making designed glass by blowing in molds hinged in two, three, or more sections. However, this technique of geometric,
arch, and baroque glass making existed for only a very short time until it was replaced by the much more efficient pressing machine method in the 1830's. This method became known as "Sandwich" glass, and developed into a very profitable and widely used method of making glass after the 1840's.
Conclusion

In analysis of the possible origins of the glass of the period between 1730 and 1830 that has been found at Liberty Hall, I would predict that a major portion of the glass is of the same technique that was used in making the original South Jersey-type glass. I feel this is evident because the properties of this type of glass (color, size, cut, shape) and the techniques used, may possibly be attributed to the influence of the early glasshouses of the southern New Jersey region. This assumption becomes even more realistic if we keep in mind the fact that the site itself, Liberty Hall, was named after the patriotic feeling of the day and that these people wanted to be and remain self-sufficient. They also wanted to be independent of their mother country, and they obviously would go to any extreme to accomplish this.

This does not mean that I feel that all of the glass is from that area, but that there does exist a strong possibility that a major proportion of the glassware found in this area is related to the South Jersey-type glassware whose characteristics are unique.

There also exists the correlation that several of the glass fragments I saw this spring, and specifically at Operation 35, are free-blown and shaped by manual manipulation. This coincides with the mold of early South Jersey-type glass and contradicts the method of making pressed New England glass.
Footnotes


5) McClinton, p. 11.


7) McClinton, p. 19.


10) McKearin, p. 113.

11) McKearin, p. 113.
Bibliography


Here are several types of wine bottles, including those used from the late 1775-1820. Many were designed with aesthetic and functional considerations.
olive-green; excavated on Long Island. Height 6\( \frac{3}{4} \)"; diameter of body 5\( \frac{1}{4} \)". See also Nos. 5 and 6, Plate 220.

No. 3. Circa 1690-1730. Type 3, squatty body with short tapering neck; neck ring cruder, narrower, and closer to lip than on 1 and 2; kick-up wide and higher, considerably reducing capacity of bottle. Dark olive-amber. Height 6"; diameter of body 6".

No. 4. Circa 1700-1730. Type 4, similar to No. 3. Dark amber, appearing dark greenish blue in reflected light (that is when the light does not come directly through the object). This condition occasionally encountered in early bottle glass, especially in olive-greens and ambers, may be due to oxidation or some ingredients in the glass mixture. See also Plate 220, No. 8.

No. 5. Circa 1725-1730. Type 5, similar to Type 4, but neck slightly longer; kick-up wider and higher; the form approaching that which evolved about 1730. Olive-green. Height 7\( \frac{3}{4} \)"; diameter 6".

No. 6. Circa 1730-1750. Type 6, the form now evolving from the squatty body to a more slender and cylindrical form with similar narrow crude ring just below lip; very high kick-up; with gradual variations merges about 1760 into the form shown in Type 7. Olive-green. Height 8\( \frac{1}{2} \)"; diameter 5\( \frac{1}{4} \). Form Type 6a, 1750-1760. See Plate 220, No. 10.

No. 7. Circa 1760-1770. Type 7, taller; cylindrical body; tapering cylindrical neck with crude ring just below lip; wide deep kick-up. Olive-amber. Height 9\( \frac{3}{4} \)"; diameter 4\( \frac{3}{4} \)".

No. 8. Circa 1770-1790. Type 8, similar to Type 7, body slightly more slender and slightly taller; tapering cylindrical neck with crude rounded ring just below lip; very deep kick-up, three inches in specimen illustrated. Olive-amber. Height 9\( \frac{1}{4} \)"; diameter 4".

No. 9. Circa 1790-1810. Type 9, the shape now evolved into type with tall body, more rounded shoulders, more smoothly finished and slightly sloping lip just above the laid on ring; very deep kick-up. Olive-amber. Height 10\( \frac{1}{2} \)"; diameter 3\( \frac{1}{2} \)".

No. 10. Circa 1790-1810. Similar to No. 9 but larger size; wide, deep kick-up. Height 11\( \frac{1}{4} \)"; diameter 4\( \frac{3}{4} \)".

No. 11. Circa 1820-1830. Type 10, similar to Nos. 9 and 10 but with more sharply sloping shoulders and wide sloping collared lip which appears for the first time. Olive-green. Height 10"; diameter 4\( \frac{3}{4} \)". Note: Nos. 9, 10 and 11 have bodies molded in a dip mold for form; shoulder and neck finished by manipulation. One earmark of bottles so molded is a slightly pebbled surface resembling hammered silver or other metal. Similarly shaped bottles of same period were also blown offhand.

No. 12. Circa 1840-1860. Type 11, molded bottle; straight sided body rounding to shoulder lower than on previous types; tapering cylindrical neck with wide sloping collared mouth. Kick-up has practically disappeared. Dark olive-green; no pontil mark as snap case instead of punty rod was used to hold bottle while finishing; made at Saratoga (Mountain) Glass Works. Height 9\( \frac{1}{2} \)"; diameter 4".

No. 13. Circa 1865-1875. Type 12, similar to No. 10 but taller. Form has nearly evolved into modern wine bottle. Color inscription on outer rim of base, "WEEKS & GILSON. SO. STODDARD N.H."

Supplemental Types

No. 14. Circa 1700-1730. A variation of the squatty type with long tapering neck, broad deep kick-up. Olive-amber. Height 8\( \frac{3}{4} \)"; diameter 6".

No. 15, A and B. Circa 1750-1770. Early molded; octagonal—two broad sides with three narrow sides forming each edge—no kick-up. Olive-green. Height 11\( \frac{3}{4} \)"; dimensions of body 5" by 3\( \frac{1}{2} \)".

No. 16, A and B. Early 18th century. Egg shape (horizontally); flattened sides; slender tapering neck; broad crude ring or reinforcement just below lip; hardly any kick-up. Dark olive-amber. Height 7\( \frac{1}{2} \)"; body 7\( \frac{3}{4} \)" by 3\( \frac{3}{4} \)".

No. 17, A and B. Late 18th to early 19th century. Elliptical body; tapering cylindrical neck; rounded collared lip. Clear green. Height 11"; body 6\( \frac{1}{2} \)" by 5\( \frac{3}{4} \)".

No. 18. Late 17th to early 18th century. Similar to No. 3 but smaller and with blown and applied handle. Collection of Charles B. Gardner.

No. 19. Circa 1815-1820. Similar to No. 10. Clear deep green; made at Mt. Vernon Glass Works, Vernon, New York. Height 9\( \frac{3}{4} \)"; diameter 3\( \frac{3}{4} \)".
1 and 5. Latticino goblets; ruby rim. 2. Sandwich bank; opaque white. 3. Wine glass; clear ruby. 4. Sandwich bank; clear, milky white loopings. (No. 4, collection of Dr. Arthur E. Corby; Nos. 1-3, and 5, collection of the authors.)

6 and 10. Coblets; clear with ruby stain; cut and engraved. 7. Harrison campaign tumbler; clear flint glass. 8 and 9. Sparking lamp and whale oil lamp filler; clear glass. (Coblets, No. 5, and 8 and 10, inherited from James B. Barnes by his great, great granddaughter. Nos. 6-10, collection of the authors.) Detailed description in text.
EARLY GLASS OF THE UNITED STATES

Top row: Left and right, pair of candlesticks, probably from glassworks of Caspar Wistar, Wistarburg, N.J., about 1740-80. Centre, sugar bowl, probably from Bakewell glasshouse, Pittsburgh, Pa., first half of the 19th century.

Second row: Left and right South Jersey style pitchers with "lily pad" decoration, probably Lookport or Lancaster glassworks, New York, about 1840-60. Centre, engraved goblet from the New Bremen (Minn.) factory of John F. Amelung, dated 1792.

Bottom row: Left, sugar bowl, Wistarburg or Glassboro, N.J., late 18th century; centre, sugar bowl, probably from Louisville, Ky., glassworks, about 1815-30; right, sugar bowl possibly from Manheim, Pa., or Henry W. Stiegl glassworks, about 1765-74.
AMERICAN BLOWN, MOULDED AND PRESSED GLASS: 1765–1865

Attributed to Steiglitz; prototypes Continental: 1. Engraved and parallel flat lip glass. 2. Vitrine enameled flat candle. 3–4. Flint bear bowl and pitcher showing Venetian diamond technique.

Med, expanded, double-domed Ohio type sugar bowl, 1820–40

Med and bulged, expanded, rimmed edge amber bowl. Pennsylvania–Maryland–Ohio type; 1820–40

Moulded and made by Wm. T. Gilbinder, Philadelphia; 1850–60

Star or "off-hand" blown by Zanesville, Ohio, artisan; 1840–50


14. Swirled and fluted expanded Ohio pitcher; 1816–26


ENGLISH GLASS: 16TH TO EARLY 19TH CENTURIES

1. Tankard, bearing the raven’s-head seal of George Ravenscroft; about 1675
2. Jug of bottle glass with incorporated white specks (Nailsea type); early 19th century
3. Goblet engraved with diamond point, probably made in the London glasshouse of Jacob Verreeft; 1761
4. Rum decanter of blue glass with gilt decoration; about 1780
5. Beaker of opaque-white glass painted in enamel colours; about 1755-60
6. Chandelier, cut glass; about 1765
7. Decanter decorated with faceted cutting; about 1760
8. Jug of mould-blown glass, with air bubbles in the cover knob; half of the 18th century
9. Fruit or salad bowl, English or Irish; late 18th century
10. Wine cooler; about 1825
ENGLISH GLASS: LATE 17TH TO EARLY 19TH CENTURIES

1. Wineglass with faceted stem; early 18th century; containing in the stem a coin of 1664; about 1685
2. Wineglass with faceted stem and bowl; about 1690; late 17th century
3. Wineglass with shouldered stem and moulded inscription, "God Save the Queen"; about 1715
4. Wineglass with drawn stem and early type of engraving; about 1730
5. Wineglass with air-twist stem, engraved with Jacobite motives; about 1750-55
6. Wineglass with faceted stem and bowl; about 1760
7. Wineglass with enamel-twist stem, engraved and inscribed "Success to the Eagle Frigate John Knill Commander," Bristol; 1756-60
8. Wineglass with faceted stem and bowl; about 1760
9. Sweetmeat glass with cut decoration; about 1750-60
10. Rummer with engraved decoration; 1821
11. Wineglass enamelled by a member of the Dalby family, Newcastle upon Tyne; about 1770
EUROPEAN GLASS OF THE 18TH AND EARLY 19TH CENTURIES

1. Goblet and cover, engraved on the wheel, Silesia; about 1740
2. Beaker with last medallion in red and gold by J. J. Mitter, Gutenbrunn, Aust.; 1792
3. Beaker, wheel-engraved through a red "fusing," Bohemia; about 1840
4. Double-walled beaker decorated with etched gold leaf (Zwischen-gold-glas), Bohemia; about 1730
5. Wine, Dordrecht, Neth.; 1728
6. Beaker enamelled by Anton Kolberg, Vienna; about 1815
7. Goblet (English), stipple-engraved with diamond point by Franz Gun-wood, Dordrecht, Neth.; 1728
8. Dish of opaque-white glass (Itritimo) painted in enamel colours. Murano glasshouse, Venice; about 1730
9. Sweetmeat glass and cover, engraved on the wheel, Bohemia; about 1750

BY COURTESY OF VICTORIA AND ALBERT MUSEUM
With their timeless simplicity of line, *Williamsburg* glass reproductions harmonize with contemporary as well as traditional table settings. This fine glassware is unequaled for beauty of design, purity of materials, and superb hand craftsmanship. Interpreted from fragments excavated in Williamsburg and copied from antiques in the exhibition buildings of Colonial Williamsburg, these reproductions are made of lead glass, strong yet translucent, with an extraordinary power to diffuse light. Only the finest, most experienced craftsmen are entrusted with making these mouth-blown and hand-formed pieces. Each piece has its individual characteristics, reflecting the skill of the artisan who produced it.

**STEMWARE**

*Air-Twist*

This spiral air-twist form was developed about 1735 and was popular throughout the middle of the eighteenth century. Many fragments have been discovered in Williamsburg. In making the air-twist stemware, a wire is introduced into the molten stem to form a channel. Several channels are successively formed and then combined and twisted into a graceful spiral by the use of wooden paddles and other special tools in the hands of a master craftsman.

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<tr>
<th>Height</th>
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<tr>
<td><em>cw 3s</em> Sherbet/Champagne</td>
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<tr>
<td><em>cw 3w</em> Wine Glass</td>
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<tr>
<td><em>cw 3o</em> Goblet</td>
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*Teardrop*

The teardrop in this intriguing pattern is formed by first introducing a wire into the molten stem. When a channel forms, a wet stick is applied and the stem develops a "tear," which the craftsman pushes up the stem to the desired spot. The teardrop sherbet or champagne glass is copied from an antique in the Williamsburg collection. Many fragments of teardrop stems were revealed in Williamsburg archaeological excavations.

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<th>Height</th>
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<td><em>cw 2w</em> Wine Glass</td>
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<td><em>cw 2s</em> Sherbet/Champagne</td>
<td>0.532&quot;</td>
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*Baluster*

There is ample evidence that this was one of the favorite types of stemware in the colonial capital. Among the common stem forms found during Williamsburg excavations was this inverted baluster with sloping domed foot, an English style of the first half of the eighteenth century. The handsome reproductions of this baluster shape are still popular today because the simplicity of style complements both modern and traditional settings.

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<tr>
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<td><em>cw 1s</em> Sherbet/Champagne</td>
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</table>
The first glassmakers in America were "eight Dutchmen and Poles" who landed at Jamestown, Virginia in 1608. They introduced to America the ancient techniques of glassmaking developed more than 2000 years ago. Those same age-old techniques are used today by the artisans at Royal Leerdam, one of the few glass manufacturers continuing the delicate art of off-hand glass blowing.

**Tavern Glasses**

This handsome set of glasses was inspired by a fragment uncovered during excavations at Williamsburg, now in the archaeological collection. Simple, graceful, these glasses will dress up any party or table setting. **cw 57** is an exact reproduction; the others are size adaptations. All are available in amber, amethyst, sapphire and emerald, as well as crystal.

**2P Pilsener Glass**

A tall, graceful glass is excellent for serving beer or ale. Although it is an adaptation of the teardrop design, its teardrop shape is in the best eighteenth-century tradition. Available in crystal. Height 7½".

**cv 5v Teardrop Vase**

This reproduction in the style of tear-drop stemware, this vase is ideal for long-stemmed flowers. It is also available in a smaller size adaptation. Height 11½".

**cw 46 Plain Wine Glass**

This superbly crafted wine glass will add elegance to any table setting. The bucket-shaped bowl rising from a tall, graceful stem is of a generous size, to please connoisseurs. Height 7½".

**cw 47 Air Twist Wine Glass**

A set of these handcrafted lead crystal glasses would greatly enhance any formal setting. The bucket-shaped bowl is supported by a particularly attractive air-twist stem. Height 7½".

**cw 15 Plain Flip Glass**

This simple, handsome glass, available in crystal, and in amber, emerald, amethyst, and sapphire, makes a stunning tall vase. Its shape is copied from an English antique. Height 7½". **cw 42 Decanter is a fine complement for cw 47 Air Twist Wine Glasses.**
ENGRAVED GLASS, CIRCA 1825-1840

1. Celery vase; clear or flint glass. Height 7 1/4"; top diameter 5". 2. Compote; clear flint glass. Height 6 1/2"; greatest diameter of bowl 8 15/16". 3. Pitcher; clear flint glass. Height 6 1/2"; greatest diameter of body 5 1/16".

4. Sugar bowl and cover; clear flint glass. Overall height 7 1/4". 5. Compote; clear flint glass; engraved decoration similar to that of 1 and 3. Height 7 3/4"; top diameter 6 1/2". 6. Sugar bowl and cover; clear flint glass; lower part of body paneled; applied pressed lacy foot. Overall height 7"; greatest diameter of body 4 5/8"; diameter of foot 3 7/8".

7. Gemel bottle; clear flint glass; Boston & Sandwich Glass Works. Height 7 1/2". 8. Pitcher; clear flint glass; patterned in dip mold. Height 6"; greatest diameter of body 4 3/4". 9. Tumbler; clear non-lead glass; cut decoration and panel with copper wheel engraving of the Widows and Orphans Asylum in Philadelphia. Height 4 7/16"; diameter 3 1/4". 10. Sugar bowl and cover; clear flint glass; copper wheel engraving; typical of Pittsburgh pieces period of 1830's. Overall height 7 5/8"; greatest diameter of body 4 9/16". (No. 4, courtesy of the Metropolitan Museum of Art; all others, collection of the authors.)

PLATE 49
12 Giant Sawtooth
c. 1820's
1830's. End.
membership.

15 Krom
Cliché found
of 7. 1830's.

19 Tackle Block

21 Fedora Loop

24 Early Ashburton

27 Way Column

30 Giant Thumbprint

33 Pegged Flute
Frosted Thumbprint

Two Rows

Fine Rib with Cut Ovals

Two Rows

Fine Rib with Cut Ovals

Three Rows

Panelled Triumphant

Tall Arrows-Bulb stem

Arrows—Five Rows

Giant Baby Thumbprint
Clear Flint glass
Made by the New
England Glass Co. (1830-1856)
From the Pittsburgh glass house.
128 YORK COLONIAL
131 COLONIAL WITH DIAMOND BAND
134 WASHINGTON CLEAR TINT MOUTH BY THE NEW ENGLAND GLASS CO. 1840'S
137 WAFFLE SEDGWICK EARLY GLASS OF THE 1830'S
140 PRISM AND CRESCENT
143 MIRROR
145 MIRROR AND LOOP
149 LOOP AND MOOSE EYE
Clear flint glass three-mold waffle and sunburst pitcher, 1810-1825.

Light green marbled with white glass pitcher of the Southern New Jersey type, probably made 1825-1850.
Left: Vase of blown glass, South Jersey type with lily-pad decoration. Right: Emerald-green pitcher made at Saratoga, New York.

Left: Blue glass sugar bowl, prunt decoration, South Jersey type; early Nineteenth Century. Right: Blown milk-glass pitcher.
Left: Stiegel-type bottle with enamel decoration. Right: Stiegel-type engraved covered flipglass with basket of flowers.
<table>
<thead>
<tr>
<th>PLACE AND PERIOD</th>
<th>17TH CENTURY AMERICAN GLASS HOUSES</th>
<th>COMMERCIAL PRODUCTS</th>
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<tbody>
<tr>
<td>VIRGINIA</td>
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<tr>
<td>Jamestown</td>
<td>First glass house was established</td>
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<td>by London Company primarily</td>
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<td></td>
<td>for the manufacture of</td>
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<td></td>
<td>beads to be used in trade with</td>
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<td>the Indians.</td>
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<tr>
<td></td>
<td>Operated until about 1623.</td>
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<tr>
<td>MASSACHUSETTS</td>
<td></td>
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<tr>
<td>Salem</td>
<td>Second glass house was started by</td>
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<tr>
<td></td>
<td>the London Company primarily</td>
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</tr>
<tr>
<td></td>
<td>for the manufacture of</td>
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<td></td>
<td>beads to be used in trade with</td>
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<tr>
<td></td>
<td>the Indians.</td>
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<tr>
<td></td>
<td>Operated until about 1623.</td>
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<tr>
<td>NEW YORK</td>
<td></td>
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</tr>
<tr>
<td>New Amsterdam</td>
<td>Everett Duycking operated a glass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>house.</td>
<td></td>
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<tr>
<td></td>
<td>Possibly he was succeeded by</td>
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<tr>
<td></td>
<td>Jacob Milver in 1674.</td>
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<tr>
<td>PENNSYLVANIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Johannes Smies established a glass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>house.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sold in 1664.</td>
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<tr>
<td></td>
<td>Operation was possibly carried</td>
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<tr>
<td></td>
<td>on by the English.</td>
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<tr>
<td>RHODE ISLAND</td>
<td></td>
<td></td>
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<tr>
<td>Providence</td>
<td>Isac C. Winslow was granted sole</td>
<td></td>
</tr>
<tr>
<td></td>
<td>privilege of making glass by the</td>
<td></td>
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<tr>
<td></td>
<td>General Court of Rhode Island.</td>
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<tr>
<td></td>
<td>He probably never exercised the</td>
<td></td>
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<td></td>
<td>privilege.</td>
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<tr>
<td>PENNSYLVANIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elizabeth Furnace</td>
<td>William Henry Stiegel erected a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>glass house, which he operated</td>
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</tr>
<tr>
<td></td>
<td>with moderate financial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>success. After production was</td>
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</tr>
<tr>
<td></td>
<td>underway at Manheim the Elizabeth</td>
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<tr>
<td></td>
<td>Furnace glass house appears</td>
<td></td>
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<tr>
<td></td>
<td>to have ceased operations.</td>
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<tr>
<td></td>
<td>(Hunter, Stiegel Glass.)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANCHESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lancaster County</td>
<td>Stiegel began erecting a glass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>house in Oct. 1764.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>First glass was blown in Oct. 1765.</td>
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</tr>
<tr>
<td></td>
<td>Second and larger house was</td>
<td></td>
</tr>
<tr>
<td></td>
<td>completed in 1769.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>He failed and was put in</td>
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</tr>
<tr>
<td></td>
<td>debtor prison in the fall of 1774.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Hunter, Stiegel Glass.)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLACE AND PERIOD</th>
<th>18TH-CENTURY AMERICAN GLASS HOUSES</th>
<th>COMMERCIAL PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW YORK CIRCA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1752-CIRCA 1758</td>
<td>Samuel Bayard &amp; Company of New</td>
<td></td>
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<tr>
<td></td>
<td>York erected and operated a glass</td>
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<tr>
<td></td>
<td>house. The company consisted</td>
<td></td>
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<tr>
<td></td>
<td>of the same men as the Glass House</td>
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</tr>
<tr>
<td></td>
<td>Company of New York, namely,</td>
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<tr>
<td></td>
<td>Samuel Bayard, Lodewijk Ramper,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Christian Herrtl.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Herrtl managed the works.</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>RHODE ISLAND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providence</td>
<td>Isaac C. Winslow was granted sole</td>
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<tr>
<td></td>
<td>privilege of making glass by the</td>
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<td></td>
<td>General Court of Rhode Island.</td>
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<tr>
<td></td>
<td>He probably never exercised the</td>
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<tr>
<td></td>
<td>privilege.</td>
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<td></td>
<td></td>
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<tr>
<td>PENNSYLVANIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Jacob Barge advertised in the July</td>
<td></td>
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<tr>
<td></td>
<td>1797, issue of &quot;The Pennsylvania</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chronicle&quot; for broken flint glass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to be worked up again at a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;new glass-house ... N.B. No Duties</td>
<td></td>
</tr>
</tbody>
</table>
|                  | Here!
|                  | His mention of Jacob Morgan, James |                     |
|                  | White and Jacob Reno as well as    |                     |
|                  | himself as buyers of               |                     |
|                  | cut would seem to indicate that    |                     |
|                  | the four men were associated in    |                     |
|                  | the venture. Nothing is            |                     |
|                  | known of the products or operation |                     |
|                  | of this glass house.               |                     |
|                  |                                   |                     |
| MANCHESTER       |                                   |                     |
| Lancaster County | The Stiegel glass house was        |                     |
|                  | advertised for sale in Jan. 1773.  |                     |
|                  | The company consisted of the same  |                     |
|                  | men as the Glass House Company of  |                     |
|                  | New York, namely, Samuel Bayard,   |                     |
|                  | Lodewijk Ramper, and Christian     |                     |
|                  | Herrtl. Herrtl managed the works.  |                     |
|                  |                                   |                     |
| PHILADELPHIA      |                                   |                     |
|                  | John and Samuel Elliott (druggists) |                     |
|                  | and Isaac Gray (wine merchant)    |                     |
|                  | took over the factory and, as       |                     |
|                  | evidenced by advertisements in     |                     |
|                  | Philadelphia newspapers, called it  |                     |
|                  | the Philadelphia Glass Works.      |                     |
|                  |                                   |                     |
| PHILADELPHIA      |                                   |                     |
|                  | Property was advertised for sale   |                     |
|                  | in April, May have been purchased  |                     |
|                  | or leased by Felix Barrett and     |                     |
|                  | George Arkovich who announced in   |                     |
|                  | the "Pennsylvania Gazette" of Aug. 27, |                     |
|                  | 1777, that they had "brought to    |                     |
|                  | perfection the blowing of glass"   |                     |
|                  | and had wares for sale at their   |                     |
|                  | warehouse in Kensington.            |                     |
|                  |                                   |                     |
| PHILADELPHIA      |                                   |                     |
|                  | Thomas Leiper, tobacconist, bought |                     |
|                  | the glass house.                   |                     |
|                  |                                   |                     |
### American Glass Houses (Cont.)

<table>
<thead>
<tr>
<th>Place and Period</th>
<th>Commercial Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1790-1825</td>
<td>Glass and/or bottles</td>
</tr>
<tr>
<td><strong>Rhode Island</strong></td>
<td></td>
</tr>
<tr>
<td>Providence</td>
<td>John Brown owned a glass works at India Point.</td>
</tr>
<tr>
<td>1792</td>
<td>Not known.</td>
</tr>
<tr>
<td><strong>Maryland</strong></td>
<td></td>
</tr>
<tr>
<td>Frederick, Frederick County</td>
<td>Probably window glass and/or bottles</td>
</tr>
<tr>
<td>Possibly 1791-1825</td>
<td></td>
</tr>
<tr>
<td><strong>Prior to 1793-2</strong></td>
<td></td>
</tr>
<tr>
<td>Johnson Glass Works were located on Tuscarora Creek, north of Frederick.</td>
<td>Probably window glass and/or bottles</td>
</tr>
<tr>
<td>1808</td>
<td></td>
</tr>
<tr>
<td><strong>After 1793-3</strong></td>
<td></td>
</tr>
<tr>
<td>A. Kohlberg, an employee of Amelung, assisted in the manufacture of window glass at late 1793, operated a glass house. Possibly he took over the second glass house built by Amelung about 1787 (John Ramsey). Map of 1808 shows &quot;A. Kohlberg New Glass Works&quot; near the first Amelung house which is designated &quot;Old Glass Works.&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### Occupation

- Probably 1794, The firm became MacGregor & Company, Jeremiah Van Rensselaer, Elkanah Watson, Robert MacGregor and Thomas and Samuel Mather. (Munsell, Annals of Albany.)
- April 1795, The firm became Thomas Mather & Company (Munsell, Annals of Albany.)
- 1796, The Hamilton Manufacturing Society (name on stock certificate 1803) was incorporated by Jeremiah Van Rensselaer, John Saunders, Abraham Ten Eyck, Elkanah Watson, Frederick A. De Zeng, K. K. Van Rensselaer, Thomas and Samuel Mather, Douw Fonda and Walter Cohran. Formed the town of Hamilton. Spafford in his 1813 Gazetteer of the State of New York says that there were then two large glass factories and one small one. (Bishop's History of American Glass Manufacturing gives date of incorporation as 1797.)
- 1815, Said to have closed down due to lack of fuel.
- 1820, However, in the New York Commercial Advertiser of December 16, 1820, the Hamilton Manufacturing Company of Albany announced payment of a stock dividend and, according to Weeks, glass globes were being manufactured at Albany in 1823. We have been unable to find a record of any glass works other than the Hamilton at this period. It is possible that the glassworks came from a source other than the glassworks and Weeks may have confused the Albany and Rensselaer Glass Works.
- 1823, Spafford in his 1824 Gazetteer refers to Hamilton as "formerly the seat of an extensive manufactory of glass."
1909 The firm became B. Bakewell & Co.—Benjamin Bakewell, Benjamin Page and others.

1811 Bakewell & Co., also called Bakewell & Page—Benjamin Bakewell and Benjamin Page—owned the works. 1811 or 1813 they took over the glass house erected in 1809 on Water Street above Grant by George Robinson. Called their works the Pittsburgh Flint Glass Manufactory.

1824 Received honorary mention "for good specimens of their cut glassware" shown at the first Exhibition of the Franklin Institute. The firm became Bakewell, Page and Bakewell—Benjamin Bakewell, Benjamin Page and Thomas Bakewell (son of Benjamin).

1825 The firm received a "Reward for best cut glass pair of decanters" at the Second Exhibition (1825) of the Franklin Institute. (One of the decanters is shown on Plate 50.)

John P. Bakewell was also connected with the company for in 1825 J. P. Bakewell of Bakewell & Co. was granted a patent in connection with press glass knobs, and in 1834 John and Thomas patented a glass blowing machine. (Patent records)

Part of products was sold at the factory, part sent through the western states.

1836 Firm became Bakewell, Pears & Co.—John Palmer Pears entered the firm. However, two 1836/37 directories, Lyords and Harris, give the firm name as Bakewell & Co. Had a warehouse in Wheeling.

circa 1840 Closed down during the financial panic and depression.

1845 Built a new factory.

By 1850 Benjamin P. Bakewell junior was a member of the firm.

By 1867 The members of Bakewell, Pears & Co. were John P. Pears, E. B. Campbell, Benjamin Bakewell Jr. and J. W. Paul.

By 1876 The firm members were Benjamin Bakewell Jr., E. B. Campbell, Thomas C. Pears, Benjamin B. Pears and Henry P. Pears.

At the 1876 Centennial, Bakewell, Pears & Co. exhibited pressed and blown crystal and ornamental glassware and received an award for their pressed glass.

1882 The factory closed.

1809-1811* or 1813* George Robinson erected a small glass house which he sold to Bakewell & Co.

New York
Near Utica in a Deerfield Township, Oneida County 1809-1827 leased to the Oneida Glass Factory Co.

John Mathew erected a small glass house.*

New York
Near Utica in Deerfield Township, Oneida County 1809-1827 leased to the Oneida Glass Factory Co.

The Utica Glass Works was built by the Utica Crown Glass Manufacturing Co.—Peter Hors, John Stewart Jr., Seth Dwyk, Hugh Cunningham and Benjamin Walker.

Bottles, flasks, and flint tableware.

About 1810 added cut glass and engraved wares to their output.

Pressed glass added to their production.

1827, advertised "Flasks, pressed and cut flint glass-ware of every description, new and elegant patterns including Castor frames with moulded and cut bottles, hall and mantel lamps, candlesticks, bureau mountings, curtain pins, apothecaries shop furniture, together with a complete supply of vials, bottles, flasks, etc.

1845-1846 (Oscar Granger's daughter)

The Mount Vernon Glass Company was incorporated Feb. 17, 1810 by Abraham Van.ck, John Steward, Jr. (of the Utica company), Alexander B. Johnson, Richard Sanger, Willett H. Sherman is said to have managed the works at first and Lawrence Schoolcraft was superintendent.

Aug. 18, 1836

Factories closed.

1910-1914

The Oneida Glass Factory Company was incorporated Feb. 17, 1810 by Abraham Vanck, William Root, Benjamin Pierson, Robert Richardson, Isaac Coe, Daniel Cook, Benjamin Hubbell, David PicIon and others. Nathaniel Granger, father of Oscar, Charles and Gideon, probably was one of the "others."

By 1833 The firm was Granger, Southworth & Co.

Before 1843 The firm became C. Granger & Co.—Charles, Oscar and Gideon. (Mrs. Carr, daughter of Oscar Granger.)

1846 Because their Vernon fuel supply was exhausted the business was moved to Mt. Pleasant near Saratoga. The site had previously been selected and improved by Oscar Granger. (Mrs. Carr)

Geneva, Ontario County
1810-7

1810-7

The Oneida Glass Factory Company was incorporated March 2, 1810 by Asher Saxton, Jasper Scepter, Bryan Johnson, Flavel Hunt and others for the purpose of making window glass. (N.Y. State Laws of 1810.)

1810-7

The Geneva Glass Manufacturing Company was incorporated March 30, 1810, by Herman H. Bogart, Robert Scott, John Nicholas and Abraham Dow. Since all of the histories of Ontario County which have been consulted state that the Ontario Glass Works were established by William S. DeZeng and Abraham Dow it would seem that at some time the two works were combined and operated by these two men.

circa 1827 The company failed and a man named Schechower bought the works. ("Geneva Gazette and Advertiser.") That one house was used for the manufacture of window glass; the other for bottles is indicated by an 1847 advertisement in the "Geneva Gazette and Advertiser.")
with the Harmony Glassworks, circa 1781-1824 merged with the Harmony Glassworks. Thomas W. Dyott, to whom James Rowland Jr. sold the works on July 10, 1833, may have been a member of the firm in 1822, for in the "United States Directory for the use of Travelers and Merchants" Dyott was listed as "Wholesale Druggist and Coolum, Manufacturer of Window glass, Bottles and vials."

by 1824 Dyott must have leased the works or have had a proprietary interest in the "United States Gazette," Oct. 12, 1824, he announced, "Philadelphia and Kensington vial and bottle factories in the subscriber having commenced the manufacture of Vials, Bottles &c, on an extensive scale." The name Philadelphia and Kensington Glass Factory appeared in his advertisements for the next 8 or 9 years. In 1831 Dyott's brother, Michael, became superintendent of the glass works and flint glass was added to the products. (Advertisement in the M. Y. Commercial Advertiser, Dec. 29, 1831.)

circa 1833 The glassworks was called the Dyottville Glass Works or Factory.1

1836 Dyott failed. Michael Dyott may have operated the factory for a short time; he was listed in the 1839 directory as a glass manufacturer, Dyottville. Plant was idle for a few years.18

1844 Dyottville Glass Works was operated by Henry B. Rapp.19

1845 Was operated by Henry Seybert.18 Flint and colored glass from the Dyottville works received an award and special mention at the 15th Exhibition of the Franklin Institute.

1846 Benners, Smith & Campbell operated the works.18 Exhibited at the 16th Exhibition of the Franklin Institute and received an award. Exhibited in 1847 also. Henry Benners, S. Decatur Smith and Quietos Campbell Jr. formed the firm. (Barber, American Glassware.)

by 1853 The firm became H. B. & J. M. Benners,—Henry B. and James M. Benners.18

by 1859 The firm was H. B. & J. M. Benners & Company,—Henry B., James M. and George W. Benners.18

1874 Henry B. Benners apparently operated the Dyottville Glass Works alone.18

1893-1900 The factory was operated by the estate of Henry B. Benners.18 The factory may have been taken over by other interests after 1900 for Van Roosebehern indicates that it was still in operation in 1926 when his book, Early American Bottles and Flasks, was published.

New Hampshire

Temple

1780-Circa 1782 The Stanger brothers—Francis, Peter, Philip, Solomon, and Daniel,—also Adam and Christopher established a green glass house. The factory was operated by various firms.

Glassboro, Gloucester County

circa 1781-1824 merged with the Harmony Glass Works.18

New York

(Albany) Dowsedeborough, On May 12, 1783, Leonard De Neufville, Jan later Hamilton, Guilder, Wees and Ford, Wallart signed an agreement to establish a glass house. The glass house was erected at Dowsedeborough about 8 miles from Albany. Works operated under financial difficulties, failed before 1792.

1808 Was called the Olive Glasswork and operated by Edward Carpenter & Co. After Carpenter's death, 1813, gradually fell into disuse.

by 1816 Was reopened under new ownership. 1817 Thomas W. Dyott was an agent for the works.24

1824 Jeremiah J. Foster bought the Olive glassworks and merged the business with the near by Harmony Glassworks.

Pennsylvania

Philadelphia

Between 1780-1784—possibly operating in 1824

Robert Morris and John Nicholson established a glass house at the falls of the Schuylkill.20 William Peter Eichbaum, glass cutter by profession, was their superintendent from 1793. Eichbaum left to superintend the O'Hara and Craig Pittsburgh glass house started in 1797. Nicholson managed the works.20 According to Weeks, the glass house was bought about 1808 by John Thoburn and made into a calico printing establishment. According to Van Reusen, Philip Jones & Co. were operating the glass house in 1810.22

1806 or 1807 Thomas Harrison, Philip Jones and Robert C. Martin were manufacturing glass at South Street near the Schuylkill. By 1810 the firm name was Philip Jones & Co.22 Philip Jones and associates may have leased the Morris-Nicholson works until they were purchased by Thoburn and have erected a new glass house near by or have purchased the original works themselves.

1813 Schuylkill Glass Works advertised that bottles could be purchased from Captain Thomas Hewett at the works or from John Holmes at No. 6 South Wharf. ("Reits Philadelphia Gazette and Daily Advertiser.""

1819 Schuylkill Glass Works' window glass was advertised as sold by Ed. Lowler.22

May 1822 Factory was advertised for rent.22

1823 George and Jacob Peterman announced that they had again undertaken the agency of the Schuylkill Glass Works at South Street Wharf recently called the Philadelphia Works.24

Connecticut

East Manchester

1783—probably 1830 The Pitkin Glass Works was established by William and Eliza Pitkin and Samuel Bishop under a legislative grant of a 25-year monopoly on glass manufacture in the state of Connecticut.

1810 J. P. Foster, superintendent of the works, is said to have taken over active management.24

1830 Works closed down probably due to lack of fuel (wood).24

Window glass, bottles including demi-johns, snuff jugs, pocket bottles, and hollow ware.

Black and green bottles, flasks and hollow ware.
The Pittsburgh Glass Works was established by Major Isaac Craig and General James O'Hara. They brought William Peter Eichbaum who was superintendent of the Morris-Nicholson glass works in Philadelphia to Pittsburgh to direct the erection of their furnace.

The factory was leased to Eichbaum, Wcntd & Co. Frederick Wendt had accompanied Eichbaum from Philadelphia.

O'Hara and Craig resumed operation with William Price of Stourbridge, England, as superintendent. A little later Price built a flat glass furnace for them. The production of flat glass was unsuccessful and the experiments were discontinued.

Major Craig withdrew and O'Hara continued the business through 1818.

Frederick Lorenz Sr. leased the plant, later bought it. In 1831 reported a capitalization of $20,000; annual production of 3,500 boxes of green glass. In 1841 Lorenz was one of the organizers of Wm. McCully & Co.

Plant was taken over by Wm. McCully & Co., which was dissolved in 1851.

The firm became Lorenz & Wightman—Frederick Lorenz Sr. and Thomas Wightman. Lorenz died in 1854 and his son, Frederick R., took his place in the firm.

Plant was leased to Fahnstock, Albree & Co.

Plant was bought by Lorenz & Wightman—Thomas Wightman, Moses A. Lorenz, Alexander W. K. Nimick.

The business was taken over by Thomas Wightman & Co.

Thomas Wightman & Co. still manufacturing window glass.

James Lee and several Philadelphia business men established a window glass house which was managed by Lee until 1815. There were several changes in the firm.

By 1817 Called the Eagle Glass Works and operated by J. Josiah, Harrison & Co.

Bought by Samuel P. Wetherell of Philadelphia who leased the works to Joseph, John, and Christopher Getzinger.

Bought by Samuel P. Wetherell of Philadelphia and several changes who subsequently had various partners. Property was sold April 40, 1862, at Sheriff's sale. Operated at two periods after the Civil War.

The glass house was finally abandoned.

Jonathan Haines erected a bottle glass house. According to tradition William Stanger was interested in the venture and contributed his practical experience. In 1817 or 1818 the works were closed down.

Samuel Clement and associates purchased the property for the manufacture of window glass.

Operations ceased.

The Pittsburgh Glass Works was erected for the manufacture of window glass. In 1802 the equipment was sold to O'Hara & Craig.

On Nov. 16, 1799, Frederick Amelung & Co.—Frederick Amelung (son of John Frederick Amelung) Alexander Furnival, his father-in-law and others—leased from George Prestman an acre of land at the foot of Federal Hill on which they established the Baltimore Glass Manufacturing or Works. The partnership was dissolved Aug. 11, 1802. (Federal Gazette.)

On Nov. 5, 1802 Philip R. I. Friese leased the works which were enlarged by his son John F. Friese.

Property sold at bankrupt sale.

John F. Friese apparently had been able to retain an interest or acquired the works since he is listed in the Baltimore directory for 1819 as proprietor of glass works at the foot of Federal Hill.

Everhart in the partnership was succeeded by Jacob Reppert, blowers at the works, acquired a half interest, John F. Friese retained a half interest. Friese died about 1830.

After 1830 Frederick and Lewis Schaum, glass blowers at the works, were associated with the Repperts. Later the firm became Schaum & Everhart.

Everhart took over the window glass house, probably the firm of Reitz & Everhart in the 1860's. Frederick and Lewis Schaum took over the bottle house and relabeled the name Baltimore Glass Works.

Schaum Brothers closed their factory and the property was purchased by Baker Brothers & Co., sole agents for the Baltimore Glass Works and the Spring Garden Glass Works.

Baker Brothers & Co.—Henry J. and Charles Baker—started manufacture of bottles and flasks of all kinds. William Swindell was manager of the factory.

They built a flint glass works.

Company was still operating.

The Dunbarton Glass Works was erected for the manufacture of window glass. Founders not known. Little known of operations and ownerships.

David Dunham & Co. of New York City advertised 50 crates of Dunbarton Crown Glass.

Crown and cylinder window glass.
**PLACE AND PERIOD** | **AMERICAN GLASS HOUSES**—(Cont.) | **COMMERCIAL PRODUCTS**
---|---|---
By 1874 | The firm was Monroe, Cowden & Co. (Atlas of Oneida Co.) and was still operating in 1878. | Window glass; bottle glass; window glass also from about 1820.
Before 1870 | Became Monroe & Hess who sold in 1870 to the United Glass Co., a Pittsburgh concern which owned several factories and bought up seven independent companies. | Window glass; bottle glass; window glass also from about 1820.
1895 | Factory was closed by the American Window Glass Co. of Pittsburgh. | Window glass; bottle glass; window glass also from about 1820.

**Massachusetts**

Chelmsford, Middlesex County

1802-1839 | Jonathan Huntington and Samuel Gore, both of the Boston Crown Glass Co., established a window glass house. | Window glass; bottle glass; window glass also from about 1820.
1827 | Failed. | Window glass; bottle glass; window glass also from about 1820.
1828 | New company was formed by Jesse Smith, William Adams, Daniel Richardson and Amos Whitney and associates. | Window glass; bottle glass; window glass also from about 1820.
1832 | They were making 376,000 feet of window glass a year which were sold in the state. Their 28 men were paid $1.25 a day; their 5 boys, 74 cents. | Window glass; bottle glass; window glass also from about 1820.
1839 | Because of bad sand and low fuel supply the business was moved to Suncook, New Hampshire, where glass was produced until 1850. | Window glass; bottle glass; window glass also from about 1820.

**New York**

Peterboro, Madison County

Circa 1804 | Peter Smith established a glass factory which may have been a new furnace or the old one built by David Coff and his associates in the late 18th century. Jonathan and Abraham Turk, R. M. Malcolm and Smith's son, Peter Skene-East, were also in the company. | Window glass; bottle glass; window glass also from about 1820.
1810 | A second glass house was erected about two miles from the first. There were many changes in the firms which subsequently operated the factories. | Window glass; bottle glass; window glass also from about 1820.
1811 | The firm was Smith & Solos. | Window glass; bottle glass; window glass also from about 1820.
1818 | Backus & Fennt—W. H. Backus and Dr. Fenn were said to have purchased the works. | Window glass; bottle glass; window glass also from about 1820.
1819 | Gerrit Smith, a son of Peter, ran the factories alone in 1819, 1820 and 1821. | Window glass; bottle glass; window glass also from about 1820.
Circa 1830 | Works closed. | Window glass; bottle glass; window glass also from about 1820.

**Rensselaer Village (now Sand Lake), Rensselaer County**

1806-1853 | The Rensselaer Glass Factory was erected at a large lake. The company was incorporated Feb. 28, 1805, by Jeremiah Van Rensse­ laer, Elekather Watson and George Pearson of the Hamilton Manufacturing Society and James Kane, Eliza Jenkins, Thomas Frothingham, Francis Bloodgood, Frederick Jenkins and Rensselaer Havens. Eliza Jenkins was president of the company; James Kane, the agent (stock certificate, 1806). | Window glass; bottle glass; window glass also from about 1820.
1806 | The company and the Hamilton Manufacturing Society in December submitted to Congress petitions for an increased tariff on foreign window glass. The "committee of the whole House... resolved, that the prayer of the petitioners is unreasonable and ought not to be granted." (U. S. House Documents.) | Window glass; bottle glass; window glass also from about 1820.
1813 | Stafford in his *Guide to New York*, published in 1813, stated that "there are two large houses, one for the making of cylinder and the other for crown glass..." Since the above was written the crown house has been moved or re-built on an improved plan. The date of the fire has been given also as 1813. | Window glass; bottle glass; window glass also from about 1820.
1819 | The company was dissolved and the works purchased by Crandell, Fox & Co.—Isaac B. Fox, Nathan R. Crandell and Abraham V. Gregory who began operations about October, 1819. (Troy "Northern Budget," Oct. 25, 1819) Gregory withdrew from the firm July 21, 1823. ("The Troy Sentinel"). | Window glass; bottle glass; window glass also from about 1820.
1826 | Property advertised for sale but seems not to have been sold. ("The Troy Sentinel," July 4, 1826). | Window glass; bottle glass; window glass also from about 1820.
Apr. 10, 1830 | Richard J. Knowlson, Isaac B. Fox and Daniel Mcgregor incorporated as the Rensselaer Glass Manufacturing Co. and leased the works to Staiger, Rush & Co.—blowers from South Jersey. | Window glass; bottle glass; window glass also from about 1820.
1834 | John B. Schmaus & Co. apparently operated the works for a short time. (Advertisement in "Daily Troy Press," April 17, 1834). | Window glass; bottle glass; window glass also from about 1820.
1835 | A. R. & S. H. Fox—Albert and Samuel, sons of Isaac B. Fox—took over the factory. | Window glass; bottle glass; window glass also from about 1820.
1842 | Received a diploma "for specimens of cylinder glass (much improved)" exhibited at the 15th Annual Fair of the American Institute of the City of New York. | Window glass; bottle glass; window glass also from about 1820.
1853 | Factory destroyed by fire. Albert Fox went to the Berkshire Glass Co. and Samuel to the Durhamville Glass Factory in which he had an interest. | Window glass; bottle glass; window glass also from about 1820.

**New Jersey**

Millville, Cumberland County

1800—still operating, now part of the Armstrong Glass Company. (Thomas Ormsbee) | Window glass; bottle glass; window glass also from about 1820.
1828 | William Coffin Jr. said to have been associated with Burin, Wood & Pearall until 1830. | Window glass; bottle glass; window glass also from about 1820.
1833 | Firm became Burin & Pearall. | Window glass; bottle glass; window glass also from about 1820.
1844 | Whitall Brothers & Co. acquired the property. | Window glass; bottle glass; window glass also from about 1820.
1854 | Exhibited green glass ware at the 24th Exhibition of the Franklin Institute. | Window glass; bottle glass; window glass also from about 1820.
1857 | The firm became Whitall, Tatum & Co. and also took over the glass works established at South Millville by Frederick Schenck in 1832. | Window glass; bottle glass; window glass also from about 1820.
1875 | Received an award at the Centennial Exposition for "chemists, druggists and perfumers wares of lime and green glass." | Window glass; bottle glass; window glass also from about 1820.

**District of Columbia**

Washington

1800-1835 (Haskins) | Window glass; bottle glass; window glass also from about 1820.
1838 | Andrew and George Way, Jacob Curtis, Cylinder glass. | Window glass; bottle glass; window glass also from about 1820.
1850 | Horace H. Edwards and Solomon Sturgis established a glass house on the S.E. corner of 22nd and Water Streets. (Frederick Haskins, Director of the Washington Star Information Bureau.) | Window glass; bottle glass; window glass also from about 1820.
1810-1815 | The Way brothers owned the factory. | Window glass; bottle glass; window glass also from about 1820.
1815 | 300,000 square feet of glass was being produced and valued at $36,000. (1810 U.S. Census.) | Window glass; bottle glass; window glass also from about 1820.