



KEENE GLASS

by Kay Fox

“Today, for those who collect old glass, there is in addition the fascination of historical and social significance, for each piece which has survived is tangible evidence of a way of life, of a stage in social and industrial development, and frequently of events which stirred man’s emotions.” This quote from a work of two universally acknowledged authorities on American blown glass, George S. and Helen McKearin, explains the widespread appeal of glass made in Keene during the early 19th century.

A placid, compact village in 1810, Keene was even then noted for its wide, level main street lined with Lombardy poplars, lofty elms and buttonwood trees. At its head stood a large Congregational meetinghouse, whose broad front gazed majestically down the full sweep of this principal thoroughfare, visibly emphasizing a dominant position in matters moral and intellectual, as well as religious. Though industry had yet to stretch beyond the saw and gristmill stage, nearly a dozen shops and stores occupied the wooden buildings scattered up and down the mile-long avenue. The weekly newspaper detailed news from Europe and the national scene; its publisher, also the local printer, maintained as well both the town bookstore and a circulating library. Out of a population of 1,646, there were three doctors and seven lawyers. Keene’s bank was the only one in the county.

Though town residences were small, like their gardens they were well-kept and attractive to the eye. The majority of inhabitants were farm dwellers, self-sufficient and noted for thrift and hard work; their

well-cultivated lands commanded a fine view of timber-covered hills and mountains. Indeed, Yale's President Timothy Dwight in writing of his travels had proclaimed: "Keene has been long esteemed the prettiest village, as it is unquestionably the largest, in the Western parts of New Hampshire. At a subsequent visit, I thought it one of the pleasantest inland towns, which I had seen."

It was a time of peaceful change. Highways were replacing old bridle paths and talk was stirring hopes of making the Ashuelot River, on which Keene was situated, navigable for large freight boats. Local businessmen envisioned untold prosperity through this quicker and cheaper transportation.

At the beginning of the 19th century no more than a dozen glasshouses were functioning throughout the entire country. In a young nation with a rising population there was an ever-increasing need for window glass, as well as for bottles in all shapes and sizes for wine, cider, salad oil, medicines, toilet water, and the like. But U. S. glass manufacturers could not compete with those of Europe. Assistance at the federal level, in the form of protective tariffs, was lacking. There was also, on the part of the consumer, a reluctance to displace foreign imports, as most early domestic glass was unable to match the quality of the products of long-established English, Irish, and Continental glasshouses.

But dramatically the situation changed. Our shipping became a casualty of blockades imposed by the two belligerents against each other in the Napoleonic Wars. To force both England and France to honor U. S. rights on the high seas, President Thomas Jefferson proposed the Embargo Act, thus forbidding all foreign commerce. The results proved disastrous to our economy and the Non-Intercourse Act, prohibiting trade only with the two hostile powers, was substituted. The situation only worsened and by 1812 we were at war with Britain.

With this continual disruption of commerce, the growing nation was deprived of many of the requisites of good living. One such item was glassware.

Though the first definite statement regarding the establishment of a glass factory in Keene appeared in the local newspaper on February 12, 1814, when Daniel Bradford, Aaron Appleton, and Timothy Twitchell, three of the 13 original proprietors of the factory, gave notice that they would be needing a quantity of timber for building, undoubtedly the idea for setting up such an industry had been under consideration for some time.

As Warwick, Mass., is only about 21 miles to the south, word of that town's progress in such an experiment must have circulated in Keene. An article in the *New Hampshire Sentinel*, November 10, 1859, signed with the initials "J.W.," reported that half a century ago the author, then a member of Williams College, was contacted by Dr. Ebenezer Hall about a large building called "Sherman's glass-house," located atop a mountain road leading to Williams College. Although no glass had ever been made there, it was said that Sherman, a well-to-do farmer, had erected a furnace in the hope that he might chance upon a lucky admixture of materials. After he expended his small fortune to no avail, the furnace stood idle. Hall, a school teacher turned physician, and ambitious to better his personal finances, asked "J.W." to request, the next time he crossed the mountain, Sherman's permission to conduct an experiment in the furnace. Both appeals were granted, and after several trials Hall returned to Warwick excited over a few specimens of glass. His good luck stimulated a regular glass mania in Warwick, and the incorporation date of that town's Franklin Glass Factory occurred February 12, 1812, although the first melting of glass did not take place until Sunday, September 5, 1813.

Keene was growing in population and wealth in spite of new taxes and the threat of a nationwide financial panic wrought by the War of 1812. It was only reasonable that a number of local citizens would pool their capital to set up a glass manufactory, thereby bringing themselves and the community no small measure of profit from a commodity no longer available from overseas. Or so they thought.

The 13 men who banded together in this enterprise were individuals of civic and business prominence. Gilbert Mellen was an established hotelkeeper; Daniel Watson, one of Keene's 10 highest taxpayers in 1810, carried on a large trade in general merchandise and saddlery; Abel Blake, at 55 the oldest of the proprietors, was also among the 10 highest taxpayers of 1810; Daniel Bradford had been named selectman for two successive years, 1812 and 1813; Aaron Appleton was in trade with his nephew by marriage, John Elliot; Amos Twitchell had already won recognition as an eminent surgeon and physician; his brother, Timothy Twitchell, had captained a ship, voyaged around the world and returned to Keene, where he would marry at the end of the year (1814) Susan Watson, the daughter of one of the aforementioned proprietors; Nathaniel Sprague, a former Dartmouth student, at 24 was the youngest of the stockholders and son of the late Peleg Sprague, who had been active in both state and national government; John Prentiss was Keene's printer and news-

paper publisher; Albe Cady was prominent in local politics, having been town treasurer, town clerk, representative and selectman during the years 1809 to 1814; John Towns was a blacksmith, contractor and builder; Luther Smith, a clockmaker and brass founder; and Justus Perry, who had arrived from Marlborough two years previously, was already a successful merchant.

Although none of the shareholders possessed a working knowledge of glassmaking, they wisely persuaded Lawrence Schoolcraft, superintendent of a glasshouse near Albany in New York State, to manage Keene's new factory. However Schoolcraft's name came to the attention of the proprietors, Timothy Twitchell met him by appointment in the spring of 1814 at Albany, N.Y., to discuss the project. The offer tempted Schoolcraft and he reached Keene the following summer. On August 17, 1814 he wrote to his son, Henry Rowe Schoolcraft, who was at that time superintendent of a glass factory at Salisbury, Vt.:

"I arrived at Keene on the 16th instant, and Caty Ann & myself found it one of the most beautiful country places we ever were in. The stockholders and directors of the establishment here were most highly pleased at my arrival, and by no means will let me go back again—I had hopes they would. I have already agreed to Caty Ann's tuition by one of the most accomplished ladies of Boston in this place. She is to board with the preceptress, in one of the finest houses in the place. Many young ladies from Boston are now in the school.

"Arrangements for the works are in a state of forwardness, the buildings up & materials provided. I will write you more particularly in a few days. . . ."

Lawrence Schoolcraft, a veteran of the American Revolution, had received valuable training in the successful window glass factory at Hamilton, not far from Albany, N.Y., where he was superintendent from 1802 until he left to assume management of a new glasshouse at Vernon, in western New York State. Both Lawrence and his son, Henry Rowe Schoolcraft, who after a brief interval in glassmaking enjoyed a distinguished career in other fields, were prolific letter writers. Fortunately a significant amount of their correspondence has been preserved, from which dates and other details of their profession can be verified. In 1810 Lawrence was writing from Vernon to his son that sales were brisk and the demand was greater than the supply. According to one letter he had left the glassworks at Hamilton over a disagreement with several individuals, including James Kane, one of

the incorporators. However, as the son was to write of his father years later, the elder Schoolcraft was adept in the "disciplinary knowledge and tact in the government of men" which "united to amenity of manners" enabled him to overcome any ill feelings he might have harbored.

In March, prior to Schoolcraft's engagement as superintendent, a notice appeared in the *New Hampshire Sentinel* proposing a glass factory "90 feet long, 60 feet wide, and 20 foot posts and 40 foot rafters, to stand about 1/2 mile northeasterly from the meetinghouse



*Cheshire County Jail on what is now Fuller Park
former location of N. H. Glass Factory*

in Keene." This location is now known (1967) as Fuller Park, on upper Washington Street.

Three months later, on June 24, the Senate and House of Representatives of New Hampshire declared that Gilbert Mellen, Daniel Watson, Abel Blake, Daniel Bradford, Aaron Appleton, Amos Twitchell, Timothy Twitchell, Nathaniel Sprague, John Prentiss, Albe Cady, John Towns, Luther Smith, Justus Perry, and their associates, successors and assigns were incorporated as a body under the name of "The Proprietors of the New Hampshire Glass Factory." Furthermore, ". . . said Proprietors are hereby empowered to divide their capital or joint stock into any number not exceeding one hundred equal shares, and thereupon to raise by assessment any sum not exceeding fifty thousand dollars, which may be laid out in the purchase of real estate; in erecting buildings; in constructing furnaces, ovens and machinery, in purchasing materials used in the composition and

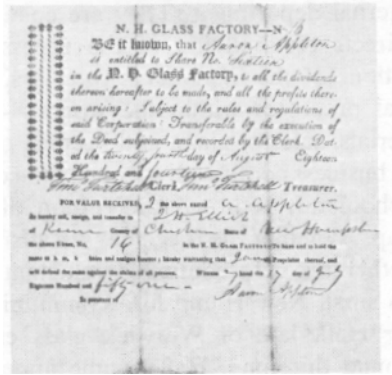
manufacture of window and other Glass, and in such chemical processes as are connected therewith, and in defraying the expenses incident to similar establishments. And the shares in said Factory shall be considered and holden as personal estate, and transferable upon the books of said Corporation; (and twenty thousand dollars of the capital stock belonging thereto shall be exempt from taxation for the term of three years from and after the first day of April next) and all workmen employed in said Factory as blowers or stokers, shall, while so employed, be exempt from military duty. Sect. 3. And be it further enacted, That the said Aaron Appleton, Daniel Bradford and Timothy Twitchell, or either two of them, shall call the first meeting of said Proprietors by posting up notifications for that purpose in at least two public houses in Keene, or by advertisement in the *New Hampshire Sentinel* printed in said Keene fourteen days at least before said meeting; at which a Clerk shall be chosen and sworn to the faithful discharge of the duties of said office; and they shall also agree on the manner of calling future meetings; and at the same, or at any subsequent meeting legally holden, they may divide their capital into shares; may elect their officers; pass by-laws; order assessments; agree upon the form of transferring shares, and do any act or acts which may be deemed necessary and proper to carry into effect the purposes of said Corporation. All elections shall be determined by a majority of voters present or represented at any meeting; and all representations shall be in writing signed by the person to be represented, and filed with the Clerk; and each proprietor shall be entitled to the number of votes according to the number of shares owned by said proprietor in the following proportion, towit: for one share, one vote; for any number of shares above one and not exceeding three, two votes; for any number above three and not exceeding six, three votes; above six and not exceeding ten, four votes; above ten and not exceeding fifteen, five votes; above fifteen and not exceeding twenty, six votes; and no more for any greater number of shares owned by the same person."

On September 30, 1814, Lawrence Schoolcraft was writing from Keene to his son: ". . . Your mother wished to move back to Hamilton, but it is now a poor place, & must go down. And it has no advantages for bringing up your little sisters and brothers. I have recommended to her, to remove to Keene in the winter, or else stay at the homestead in Vernon. Hamilton is a demoralized place, that destroyed your brother Peter. Here is a moral society, and fine place to educate my small children. My salary is \$1200 a year. I have agreed for two

years. A fine house is building, and all it wants for me to accept it, is your mother's answer. I am hearty & well—I have not felt so well in fifteen years. . . ."

Work on the cylinder window glass factory progressed slowly. There had been several stockholders' meetings as the need for added finances confronted the group even before the first melting of glass. A major problem, one that plagued most early glass factories, was the difficulty in obtaining skilled workers. Training of apprentices was long and difficult. European nations, worried over possible competition and loss of their artisans, forbade glass craftsmen to emigrate, and those who defied the authorities by departing for American shores were not anxious to reveal the trade secrets they brought with them.

In October the directors met to discuss building "a house or



Share no. 16—N. H. Glass Factory

houses" to accommodate employees. Glassmaking was a lengthy and tedious process, and the workmen needed to live close at hand as the call might come any hour of the day or night that the molten mixture was ready for blowing.

The directors were also anxious to find ways of obtaining wood and increasing their supply of stone and clay. The financial burden became so great that by October 13th it was voted to assess shares \$40 each. By October 29th the factory was advertising for 15 or 20 woodcutters and in December was asking for ashes. Twice, early in 1815, the shareholders met to decide on further assessments—the money problem was urgent even before any glass had been manufactured. It was not until the second week in April 1815 that the

New Hampshire Glass Factory actually commenced operations.

So great was local interest in the enterprise that the proprietors inserted a notice in the local paper that no visitors would be admitted on the Sabbath. By June 17, 1815, they were advertising the sale of window glass in sizes 6 x 8, 7 x 9, and 8 x 10. But in another month new assessments were proposed, and on August 26 it was announced that shares on which assessments had not been paid would be sold at auction.

A description of the works appeared in the *Literary and Philosophical Repertory* for February 1816: “. . . a manufactory of cylinder window glass, situated in the environs of the village. . . which is carried on by an incorporated company under the name of the President and Directors of the New Hampshire Glass Factory, with a capital of \$50,000. These works contain two furnaces of 10 pots each, and give employment to about 25 artists, mechanics and laborers in the internal department. They are conducted by a superintendent, who directs the building of the necessary furnaces and ovens, the proportions of the ingredients for glass, and oversees the various mechanical processes within the works,—and an agent for the supply of materials, sales of glass, and keeping of accounts. . . .”

Although the business continued, so too did the difficulties.

Lawrence Schoolcraft returned to Vernon after his stipulated two years were up. Whether he became dissatisfied with working conditions or whether his wife continued reluctant to leave familiar surroundings for a small New Hampshire community it is difficult to say. Dr. Ebenezer Hall, late of Warwick glass enterprise, became superintendent around this time. Hall's name appears on Keene tax rolls for only one year however—1817.

Poor ingredients, plus a lack of skilled workmen, resulted in a product that did not readily find a market and was virtually limited to local sales. Notices about the need for further assessments, how the business should be conducted, and announcing auctions of shares on which assessments were overdue continued to appear in the weekly newspaper. Finally disaster loomed: “The New Hampshire Glass Factory will be leased at public auction on Wednesday August 20, 1817. By vote of the proprietors. John Elliot, Clerk.”

It appears that two of the 13 proprietors, Appleton and Elliot, assumed a controlling interest. The stockholders were discouraged, unhappy over the continuing spiral of assessments and anxious to rid themselves of the unending obligations. Nearly all sold their stock for a song. Though in 1821 a notice appeared that Benjamin

F. Adams and Oliver Holman had taken over the concern, by April 1822 this partnership was dissolved and Appleton and Elliot were back in business. At this time the factory owned its own small but efficient fire engine which assisted at local fires whenever needed.

On October 28, 1825, came the announcement that the Keene Window Glass Factory (as it was then called) heretofore conducted by Appleton and Elliot would continue as John Elliot & Co., consisting of John Elliot, Oliver Holman and Benjamin F. Adams. By 1829 the firm was advertising as Adams, Holman and Wood, as John Elliot had transferred his interest to John Vose Wood. That year the firm was the second highest taxpayer in Keene, but by 1830 this partnership was dissolved, and the new one consisted of Benjamin F. Adams, Oliver Holman and Ormond Dutton. Despite the continual change of firm names, business was good, as it had been ever since Appleton and Elliot purchased the controlling interest and established careful management. A great deal had been learned at the expense and experience of the original proprietors.

In the first Keene directory, issued in 1831, glassmaking ranked sixth as an occupation. A total of 16 glass blowers were listed, 10 from Adams, Holman and Dutton and six from Perry, Wheeler and Co. (the second glasshouse established in Keene).

From its earliest days the window glass factory gave employment to a large number of people, in addition to the blowers. Many were engaged in various departments of the manufactory, while teamsters and woodchoppers were kept busy providing fuel for the hungry furnaces. Others gathered sand and hard wood ashes for use in preparing the glass mixture. In an 1832 report to the government, relative to manufacturers in the U. S., Daniel Watson Jr., subagent for Keene, stated that the Adams, Holman and Dutton Window Glass Factory owned real estate, buildings and fixtures valued at \$5,000. In addition the factory owned eight horses and six oxen and used \$12,800 worth of wood and materials for making glass, most of which was obtained in New Hampshire. The only non-domestic substances listed were \$800 worth of clay, imported from Holland, and \$500 worth of foreign salt. The yearly value of window glass was reported as \$30,000, of which New Hampshire absorbed one-fourth, and the remainder was sold in other New England States. Though the salary appears pitifully small by today's standards, the 30 workmen employed received \$1.25 per day, a wage that compared most favorably with other manufacturing salaries reported.

Around 1839 the manufacture of window glass from crystalized

quartz began in Keene, rendering it much stronger and clearer and endowing it with a peculiar and beautiful lustre. Tradition claims that some of this quartz was mined on West Hill. The material to be melted was first pulverized under a large stone, similar to a millstone. The stone rotated on edge, grinding slowly as a horse plodded wearily in a circle.

Thomas Rand, associated with the local newspaper for over half a century, later reminisced:

“In 1840, and probably for twenty years prior. . . a huge wooden building stood on a piece of ground a few rods west of the present county jail on Washington Street. It was surrounded by smaller buildings, sheds, stables and immense piles of hemlock wood disposed in such a way as to form avenues through the grounds, giving the locality the appearance of a miniature village. The buildings were blackened by clouds of smoke which issued from a wide opening in the roof of the main building, day and night, for about five days of each week during the winter season, reminding one of the eruptions of Vesuvius and requiring little stretch of the imagination to make the huge structure seem like a real volcano. The interior presented a still more weird spectacle, for here the mysterious process of glass making was in constant operation in its various stages, outside interest in which centered upon that portion of the work performed by the ‘blowers,’ a class of workmen expert in manipulating the molten, lava-like mixture contained in the big cauldrons and by means of the blowpipe forming it into hollow cylinders for other workmen to finally convert into merchantable window glass. A material diminution of the volume of smoke issuing from the building’s ‘crater’ was always a signal to the young people that the melting process was completed and that ‘blowing’ was about to begin. At such times the factory would be crowded far into the night with spectators who never tired of watching the workmen who manipulated the blowpipes. Trousers, slippers and a tight-fitting woolen shirt comprised the glass-blower’s dress when at work, the tremendous heat from the glowing melting pots being almost unbearable. Ten or twelve of these workmen stationed along either side of the big furnace made a picturesque scene as they alternately dipped their blow-pipes into the liquid fire and swung the glowing mass that adhered around and above their heads, while boys with water pails and dippers continually passed to and fro to relieve the burning thirst which the heat engendered among those so directly exposed to it. With the mouths of the melting pots open the whole interior of the building was lighted up with a glow

that gave the appearance of a conflagration, making a startling impression on one not accustomed to the scene.

"The blowers were, generally, foreigners who learned the art of glass making in the old country. They commanded large wages for those times and it was said of them that they made more money than the proprietors of the works realized from their investments. Among the first-class workmen in this establishment were some who made Keene their permanent home. John Clinesmith, Charles Hirsch, Nicholas Hilt, Henry Lange, Augustus Smith and a few others whose names are not now recalled, were of this number, but no one of those names is now living. . . ."

Only the sketchiest details are known about the glass blowers. Their nomadic tendencies are illustrated in the example of Charles Hirsch, born in Baltimore, Md., in 1813. His older brother, born in Germany, was later associated with a glass factory in South Boston. Though it is only a guess, it seems logical to conclude that the father emigrated to the United States to work in the Baltimore Glass Works, and that his sons were trained at an early age to their father's occupation. Young Charles married Isabelle Macauley Jameson, of Antrim, N. H., and their first three children were born in Burlington, Vt., between 1834 and 1839. As the Champlain Glass Company of Burlington started up in 1827, quite probably Hirsch worked there. The next child was born in Suncook, N. H., in 1841. As this was only two years after the Suncook Glass Works had moved there from Chelmsford, Mass., it seems reasonable to think that Hirsch was employed as a glass blower. Suncook's commercial product was window glass. By 1843, the birth year of the next child, the Hirsch family was settled in Keene, and the peripatetic father was established as a glass blower for the window glass factory.

One of the most colorful blowers connected with this window glass factory was Augustus Smith (Schmidt), a Bavarian, who died at Keene in 1843, at the age of 60. In his earlier years he had marched with the Grand Army of Napoleon. Captured by the British, he was sent as a prisoner of war to Halifax. Afterwards he enlisted in the British Army but deserted at the first opportunity to seek haven in the United States. He married Susannah Trask at Keene on March 18, 1819.

But the glass blower holding most interest for devotees of New Hampshire glass is Nicholas Hilt, first mentioned in Keene records in 1826, when he and his wife Maria bought property "on the west side of the road leading from the Glass Factory to Gilsum." As a matter

of fact Hilt is mentioned 29 times either as grantee or grantor in the exchange of property in records in the County Court House at Keene. A number of these transfers included Stoddard property, and by 1850 Hilt was associated with Luman Weeks, Almon Woods, Ebenezer A. Rice and Frederick A. Gilson in the manufacture of bottles at The Box, South Stoddard. Earlier Nicholas Hilt briefly owned and operated the third glass works in Keene at a time when he was employed at the window glass factory, undoubtedly to give himself and some co-workers employment while fluctuations in business idled the larger firm for short periods of time. Fragments of glass of a brownish color, similar to that made at Stoddard, were found years later in the soil of what was once Hilt's Gilsum Street property, leading one local historian to conclude that the formula for certain Stoddard bottles originated in Keene with Nicholas Hilt. After his brief venture in this neighboring town (Hilt had sold out to his partner by 1853), he continued to make his home in Keene, where he died in 1871, aged 60. The exceedingly small amount of taxes Hilt paid Keene reveals that the so-called third glass factory was a very minor business operation, lasting just one year—1841. No ads appeared for any of its products; there are no authenticated articles attributed to it.

On the other hand, the Keene Window Glass Factory's free-blown pieces, those individually created specimens made by the blower for himself or his friends, are now highly collectible items. One, listed in the 1932 sales catalogue of early American glass from the collection of Herbert Delavan Mason, was a light green Grecian urn type three-quart pitcher and of it was written: ". . . it leaves nothing to be desired in beauty of design or clearness of color." Another free-blown pitcher from this "north factory" was described in the same catalogue as "one of the few known Keene lily-pad pitchers. Leaves nothing to be desired in technique or form."

The lily-pad decoration, used in a number of the Keene Window Glass Factory's handsomest, freeblown "individual pieces," was done at the Champlain Glass Works and at two New York houses close by, the Redford Crown Glass Company, established in 1830, and the Redwood Glass Works, set up in 1833. Undoubtedly the lily-pad design travelled from glasshouse to glasshouse, as blowers moved hither and yon.

Matthew (Matt) Johnson, a former Englishman and expert glass blower, was one of those employed at Stoddard in its early glass-making years. Having many friends at the Keene Window Glass Factory, he would frequently drop in and show his prowess and

craftsmanship by fashioning a lily-pod pitcher or scent bottle with the blowpipe handed to him by admiring cronies. Local tradition insists that the contents of a bottle added to the conviviality of the meetings. Some of the handsomest pieces from this Washington Street factory were made by the visiting Matt Johnson for his friends.

For many years a store trade was carried on in conjunction with the window glass factory, and the shop changed hands almost as frequently as the glasshouse. Between 1814 and 1831 there were seven changes of ownership in the glass factory, though often the same men either bought back into the company or a new partner appeared on the scene. Following Adams, Holman and Dutton, John Elliot returned to the field in 1837 as sole owner but by 1841 the factory was back in the hands of Benjamin F. Adams, as B. F. Adams & Co. For many years these firms were among the highest taxpayers in the town, and although it is impossible to separate the profit of the window glass factory from that of the store with which it was connected, without doubt both were successful. Indeed, during the first half of the 19th century many of the highest taxpayers in Keene were those who flourished as tradesmen.

In 1848 a new firm took over the glass factory. Joshua D. Colony, well established in Keene affairs, entered the business with his two nephews, Timothy and Henry Colony, under the name of J. D. Colony & Co. They were the last to use the old north factory, the final names to be connected with glassmaking in Keene. It is claimed that theirs was also the last cylinder glass factory to be operated in New England. The effects of a severe business depression, the lowering of import duties, and the growing scarcity and high cost of the wood used for fuel all tolled the end by 1853 for an industry that had played a significant role in the growth of the town. For a few years after the buildings had been abandoned they were a constant reminder of another era. As the *New Hampshire Sentinel* editorialized in 1855: “. . . its lofty front still stands, a monument of better days and of a better policy in our national government. The free trade stupidity has knocked down more glass factories and interrupted more industries than the fiercest winds that ever blew.” By the end of that year, on Saturday, December 15, 1855, an incendiary’s torch reduced the entire plant to ashes. Although the fire companies responded promptly to the alarm, lack of water blocked all attempts to quell the flames. It was remarked that the loss to the owner was not serious, but considerable to those who for a long time had resorted nightly to the deserted premises for firewood. A fine growth of clover sprang

up as a result of the ashes formerly used there and neighborhood cows enjoyed excellent pasture. In the 1870's the ground was used by a baseball club and in 1885 a county jail was erected there. In 1926 an armory was built on the site, and when a new armory was erected at West Keene in 1959, the older building began serving as headquarters for both the city's Recreation Department and the Golden Age Club.

But it is Keene's second glass company, the works erected on Marlboro Street, and sometimes referred to as the "south factory," that produced the thousands of bottles and flasks now prized by collectors.

On November 21, 1814, about three months after his arrival in Keene, Lawrence Schoolcraft, first superintendent of the window glass factory, wrote to his son, Henry Rowe Schoolcraft:

"it is in contemplation here, to have a Flint glass establishment by two gentlemen of this town. They want a third one to join them, to take a third part of the concern, and your name has been mentioned to me, as a proper person to engage in it, and to take the superintendence of the same. You mentioned in a letter to me that you had a notion to take a fifth part of the stock of the Vermont works, but had not agreed. Should you see any danger of failure in the Vermont works, take this into consideration. Flint works are very profitable at present. Should you take a notion to be concerned in the works, you might still stay six months in Vermont, & in the meantime I, with one of the concern here, could put them in great forwardness. After your answer to me, one of the gentlemen will call on you to consult on the business. An answer is wished for, without delay. This is a secret, and must be kept as such. The persons wait your answer to make other arrangements, if you decline, being determined to go on with the business."

Timothy Twitchell and Daniel Watson, both proprietors of the window glass factory, were the two gentlemen mentioned in Schoolcraft's letter. Within a month Twitchell was to marry Watson's daughter, Susan, and it seems evident that the well-to-do prospective father-in-law was satisfied to become a "silent partner." His property on the Third New Hampshire Turnpike (now Marlboro Street) on the east side of Beaver Brook was to be the location of the proposed factory.

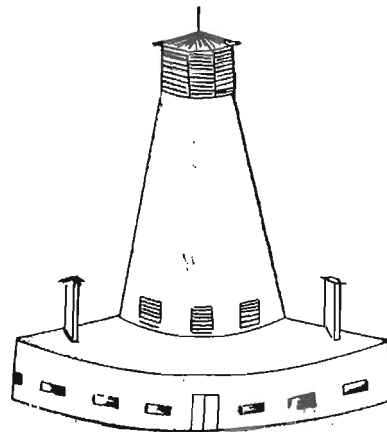
The name Schoolcraft figures prominently in the history of Keene glass. Though Lawrence Schoolcraft was the guiding mentor in the beginnings of the window glass factory, his fame is overshadowed by that of his son. Born in Watervliet, N.Y., in 1793, the younger Schoolcraft developed into a precocious child, preferring studies to the

usual boyhood amusements and eager to excel in every undertaking, whether it was building a simple waterwheel or collecting a shelf of minerals. Of an optimistic and self-confident nature, he early mastered the art of glassmaking under the tutelage of his father at the extensive glassworks of the Hamilton Manufacturing Society. At the age of 15 he was sufficiently experienced to travel to Philadelphia to obtain a particular type of clay used to make pots for melting glass. When his father left Hamilton for Vernon in 1808 to assume superintendency of the Oneida Glass Factory, the first window glass factory to be established in central New York State, Henry Rowe followed in the fall of 1809 and unquestionably worked under his father for a short time. However, by early 1810 young Schoolcraft was associated with a new company, the Ontario Glass Works at Geneva, Ontario County, N.Y.

Some three years later he was in Salisbury to superintend the newly established Vermont Glass Factory on the banks of Lake Dunmore. Here he also pursued the scholastic subjects he so enjoyed and, under the direction of Professor Frederick Hall of Middlebury College, he built a chemical furnace and made a series of experiments. Anxious to apply his results, he urged the Vermont Company to let him produce works of flint and crystal glass, a phase of the craft that seemed to occupy more and more of his thoughts. The Salisbury works contemplated a second factory to make bottles. With prospects of two glasshouses, things were growing difficult and Henry Rowe offered his father one of the factories to manage. But at that time Lawrence Schoolcraft felt that he was well situated at Keene and recommended his son retain control of both Salisbury works: "Keep what you have in your power—it is not so easy to get it, as to lose it." Letters between father and son emphasize the respect with which the latter received advice and the close family ties which existed. Nevertheless, young Henry Rowe was restless. The situation in Vermont was not shaping up to his liking; he would have preferred a military commission in the War of 1812 which was raging along the frontiers. Added to that, his older brother Peter, who had been with him at Salisbury, had gone to another glass factory, to the displeasure of the Vermont proprietors. And to make matters more intolerable, young Henry was having difficulty in collecting his own salary. Yet it was not easy to make up his mind to leave for a new venture and he gave his father no definite answer concerning the proposed flint glassworks.

Then a letter dated the last day of December 1814 arrived from

Timothy Twitchell in Keene: "We think this place has advantages which are not to be found in perhaps any place in New England. Wood is in plenty and is brought several miles without any hill and at a cheaper rate than in any of the neighboring towns. Building is done at less expense than at almost any place. Water carriage can be had from all parts of the United States and the world to within 12 miles of this place and on account of the situation of the country all travel to Boston & Eastward must come through this place from the West & Northwest. You will find Keene a handsome village and in it you will find good society. Good rock sand is to be had in any quantity at the distance of 60 miles and I expect without much doubt it may be had within 35 miles. All the other materials can be had conveniently as at any place. In case we could agree the business would be conducted by you and myself. I think if Flint Glass business can be carried on to advantage at any place it can be done here & I believe your Father will agree with me in this. If you should have any idea that you should like something like what I have mentioned I should like to hear from you as soon as possible as I think if we



Plan for the flint glass manufactory

determine to go forward the sooner we begin the better. I have made an estimate of the probable expense with the assistance of your Father and if you think it not too much trouble I should be pleased to have an estimate from you exclusive of the building, as you will not be able to calculate the expense of building here. We should wish to

Albany January 30th 1815

Dear Sir

Since you left this place I have drawn a plan of the building you let me a sketch of, and find if the sides are fourteen feet the diameter will be forty one and if the diameter be thirty five the sides will be a trifle short of fifteen. I wish you to write me by the next mail how large the sides must be whether 15 or 17 feet, and whether you expected the posts of the wings to incline the same as those of the main building, or whether they are to be erect if they are erect the ^{posts} cannot be framed into the posts of the main building, as they are inclining - you will know whether fifteen feet will be a sufficient width or not and will give me the necessary instructions by the next mail if possible. We commence taking in this day and are forwarding the thing as fast as possible.

Yours very humble servant
H. R. Schoolcraft
Tim Twitchell

Letter from Timothy Twitchell to H. R. Schoolcraft

erect the works substantial and with economy. I was led to think of you from conversation with Mr. James Kane of Albany last spring when I met your Father there." A footnote to the letter said: "Be so good as to let this be seen by no man."

Glassmaking was still conducted under a veil of mystery and the formulas carefully guarded. The emphasis that both Lawrence Schoolcraft and Timothy Twitchell place on secrecy indicate that even the contemplation of such a work was kept in strict confidence.

On January 9 Twitchell answered a note from Schoolcraft and

stated that he would meet with him at the end of the week or the beginning of the following one. Twitchell's next letter to Henry Rowe is dated January 30, 1815: "Since you left this place I have drawn a plan of the building you left a sketch of and find if the sides are 17 feet the diameter will be 41 and if the diameter be 35 the sides will be a trifle short of 15. I wish you to write me by the next mail how large the sides must be whether 15 or 17 feet and whether you expected the posts of the wings to incline the same as those of the main building or whether they are to be erect if they are erect the plates cannot be framed into the posts of the main building, as they are inclining—you will know whether 15 feet will be a sufficient width or not and will give me the necessary instructions by the next mail if possible. We commence taking wood this day and are forwarding the thing as fast as possible."

By February Twitchell was writing: "The bricks which was (sic) mentioned could be procured this winter are 12 miles distant and will cost three dollars per 1,000 for transporting and four and a half at the kiln. Therefore as they will cost seven and a half dollars per M I thought best to take no more than would be necessary for the furnace and was not positive whether we should want 10,000 for that purpose therefore wish you would write me immediately on the receipt of this how many we have to get this winter. The man will commence fetching before I shall have your answer but will not have many thousands here before that time—we can procure bricks made for four dollars per M in the spring by contract if not less—we have taken about 100 cord wood & engaged about the quantity we shall want. Have engaged the stones for underpinning but have not yet let out the building but expect to this week. We have made a contract with one of our stores our orders for goods and they discount 10 percent on the amount we to settle (sic) and pay every six months which I think is a good bargain as we may pay considerably less in store pay as well as cash. Mr. Watson has bought the old house near the Factory ground and is about repairing it and a very good family has engaged to go into it to keep our boarders (workmen). I think this would be better than for us to purchase—Mr. Watson sends respects. . . ."

Later that month he was writing Schoolcraft that he had made inquiries regarding a blacksmith and had also found a shop in the village "in the center of business" where they could sell their products. He added that they had been obliged to pay from \$4 to \$5 for blowpipes from the New Hampshire Glass Factory as no one knew how to make them. They had also contracted for a frame for the

whole building for \$200 and had procured more than two tons of Lewisboro sand and engaged a workman recommended by Henry's father. He concluded on a hopeful note regarding the end of the War of 1812: "Peace will let us get our own clay early from Philadelphia."

By March Twitchell's letter was commenting of their progress—"as well as could be expected"—and added that he had engaged a mason formerly with the New Hampshire Glass Factory for less money than customary in view of the length of the job. He ends: "I am going to Boston next stage to be gone about a week & I shall hope to find you in Keene on my return. If it would be agreeable you can board with me as soon as i return."

Schoolcraft evidently arrived on schedule for the next correspondence is addressed to him at Keene and dated April 12, 1815. It was from Peter Starr, a lawyer who was striving to collect Henry's back salary from the Vermont Glass Works, and he mentions that he has commenced suit in the County Court and has attached the real estate of the company.

Articles of co-partnership between Timothy Twitchell and Henry Rowe Schoolcraft were signed on July 25, 1815: ". . . for the purpose of erecting works and carrying on the manufacture of Flint Glass Ware generally in its various branches." As part of the agreement neither party was to engage in the manufacture of glassware or any other manufacture which might interfere with the concern. Schoolcraft was to take charge of work in the interior of the building and devote his time and skill as an artist in the construction of suitable furnaces, ovens, pots (or crucibles) and in the composition and fusion of flint or other glass deemed most advantageous to manufacture. Twitchell was to keep the books, as well as to transact the outdoor business, procuring all materials necessary in building the factory and in making the glass. He was also responsible for selling the products and buying, selling and retailing goods, wares and merchandise generally. Both salaries were retroactive to February 1, 1815, and the agreement was witnessed by Twitchell's wife, Susan, and his father-in-law, Daniel Watson.

On April 15, 1815, Schoolcraft's former instructor, Frederick Hall, had written mentioning Henry's experiments on Clarendon sand and expressing appreciation for assistance in obtaining new subscribers to the *Literary and Philosophical Repertory*, published in Middlebury, Vt. He also requested information on the new Keene flint glassworks. Schoolcraft complied and the following, from a letter published in the February 1816 issue, indicates his great expectations:

“ . . . These works were built at the instance of Captain Timothy Twitchell, one of the principal proprietors, and are situated half a mile from the village on the road leading to Boston, 80 miles distant from that town and 12 from Connecticut river. The Glass-house is an octagonal wooden building, 42 feet at the base, and rising in the form of a cone to the height of 53 feet, where it terminates in a spacious ventilator for the escape of smoke and other gaseous bodies, which are liberated in great abundance from the burning of wood in the furnace below, and the fusion of the materials employed for making glass. There are wings on each side of the main building, divided into convenient apartments for preparing materials and crucibles, and for various other processes necessary in the manufacture. Connected with this manufactory are works for cutting and polishing all sorts of glass, which enables the proprietors to have their ware finished, with a beauty that has long been called for in American glass.

“This manufactory has been in operation about three months; it contains one furnace of seven crucibles or pots and furnishes employment for 16 workmen, exclusive of those employed during the winter season for chopping wood. Respecting the quality of the ware, I will add, that it has obtained a high reputation for its purity and strength, and that the local advantages of the works and the success which has attended them generally, give the proprietors full confidence in their prosecution. . . .”

In October Schoolcraft, in Albany to purchase broken glass, or cullet, was contemplating an expansion of the firm. As his partner wrote from Keene: “. . . I think I feel pleasure with the idea of forming a connection with the gentleman you mention after your description of him and hope he will find no objections in me to the connection. I conclude in case we form a connection with Mister D. the calculation is to open a store of goods which you know I have always thought would be of the first consequence to our concern. I conclude he will expect to take into account of course our time in erecting the works— I think it would be well for him to come. . . . and if everything should be satisfactory we then can close the business. In case we calculate to open a store I think we ought not to lose the hire of Fisks & I think it will not be let before you return.— We are all well as could be expected. Dodge has begun making pots today.”

By November 25, 1815, the local newspaper was advertising “flint glass tumblers and decanters and similar descriptions of

glassware," from Twitchell and Schoolcraft's factory.

It seems the business deal with Mister D. fell through, as no further mention of him is ever made. The partners eventually moved their warehouse, however, from the manufactory to the Red House (store) one door north of Shirtliff's Tavern (now the Eagle Hotel). This is one of the last public notices of the Twitchell-Schoolcraft partnership. By March 20, 1816, came the announcement of the articles of co-partnership between Henry Rowe Schoolcraft and Nathaniel Sprague. Article one stated that the subscribing parties entered into co-partnership to manufacture glassware (not specifically flint glass as in the earlier alliance) and the firm would be known as Schoolcraft and Sprague. Furthermore both would share evenly all expenses and the profits would likewise be evenly divided. A further regulation, similar to an earlier one agreed to by Schoolcraft and Twitchell, declared that neither party would engage in any other occupation during the continuance of the co-partnership without the other's consent. A newspaper item announced that Schoolcraft and Sprague would assume the indebtedness of Twitchell and Schoolcraft.

There seems to be no reason for the dissolution of the partnership between the latter other than the business difficulties unexpectedly encountered when peace opened the floodgates of imports, deluging the country with English and Continental glassware. Together with the numerous domestic glass factories spawned to fill a wartime void, the supply far exceeded the demand. Foreign manufacturers were willing to undersell in order to reinstate their products in popular favor and wreck domestic competition. Accordingly, a depression swept over the entire industry, hitting in particular those factories turning out the more expensive flint glass. Twitchell was a family man, his first child having been born in 1815, and he felt encumbered to seek his fortune elsewhere. He left Keene for Petersburg, Va., where he stayed six years, and then moved his growing family to Pensacola, Fla., engaging for the next 30 years in the mercantile and lumber business, and returning to Keene in 1851, where he died in 1867, aged 84.

Nathaniel Sprague, on the other hand, was a bachelor, and remained so to the end of his life. Before he joined Schoolcraft, he was affiliated with the window glass factory. That, too, was undergoing difficult times. Both young men (Sprague was 26, Schoolcraft 23) belonged to the Keene Light Infantry, Sprague being the captain and Schoolcraft one of the four sergeants, and no doubt Sprague was carried away by his friend's usual optimistic forecast. Neither had fam-

ily responsibilities; they were free to work and to dream of coming fortune.

In June 1816 the New Hampshire Legislature exempted the Flint Glass Factory from taxation for five years, providing the value of the property did not exceed \$10,000. Furthermore, it exempted the workmen there—one master stoker, two common stokers, two wood-dryers, one calciner, one pot-maker, and the blowers—from military duty while employed in their respective occupations in the factory.

But despite the tax exemption the downward trend continued. A letter to Schoolcraft and Sprague from James Andrews & Co. at Boston, dated July 17, 1816, is significant, indicating both inability to procure qualified glass blowers and the current slump in the market:

“Your favor of the 15th inst. came duly to hand—our vessel arrived from Bremen a short time since, we had no particular communication from Mr. Winthrop respecting the workmen you wished him to procure from Germany. Our vessel remained there so short a time & he was so much engaged, that he probably had not time to attend to it, and we feel doubtful whether he would be able to succeed without having some funds placed there for that purpose—we expect another vessel from there in the course of a month or six weeks, perhaps by her we shall have some particular (sic), which we will immediately acquaint you with. We cannot at present recommend your sending any glass ware here, as our market is completely overstocked with all kinds of glass & crockery ware, which makes it very low and dull sale. We should feel happy if we could encourage any thing at this time but we never wish a commission at the expense of our friends. . . .”

Nor was it easy for the young capitalists to collect their just dues. Even by July the books listed nearly 50 names, with the amounts owed to the earlier partnership of Twitchell and Schoolcraft, totaling \$200.17, still unpaid. At the same time the partners had a heavy debt to pay and by August 31 Schoolcraft had borrowed over \$370 from his father. Nevertheless a letter from William Lee, late consul at Bordeaux, dated November 24, 1816, indicates that the partners were still looking for skilled craftsmen: “I understand from a mutual friend of ours, Seth Hunt Esquire, that you are interested in a glass worker. A Swiss who has been regularly brought up to that business came over in the same ship with me from France. He is an industrious sober man who has had a good education. His part is that

of the composition. He speaks French and German and tells me he would engage for low wages that would clothe and support him in his frugal way. I think he is an estimable man. As all the factories in this vicinity are at a stand, if you are in want of such a man he would come cheap and be found highly useful. If my letter should meet consideration please to direct to Mrs. Lee at No. 5 Broad Way (sic) New York as I shall be absent to Washington—on opening the letter she will send for the Swiss if you can employ him and direct him how to reach Keene. . . .”

The post-war business panic continued to chill infant industries. On December 16, 1816, Schoolcraft and Sprague had a \$300 mortgage on their property. The next month they received a loan of \$620.62 from Henry's father. This new advance, however, proved of no avail, for in addition to the widespread depression, Schoolcraft and Sprague, like the original proprietors of the Window Glass Factory, were not careful administrators and spent more than they earned. Their financial troubles grew and by February 1817, the Flint Glass Manufactory was still under mortgage to Justus Perry for \$300. By April young Schoolcraft was back in Vernon, methodically inventorying his liabilities, both in a private capacity and as a partner in the firm of Schoolcraft and Sprague. On September 17, 1817, he was declared an insolvent debtor. But he remained undiscouraged. As Professor Hall had written to him earlier: “You have youth, health, vigor, leisure, the manual means, a strong intellect and a determined persevering desire to excel in whatever undertaking you are engaged. Enjoying all these advantages the public has a right to expect much from you.” Only 24, Henry Rowe Schoolcraft took financial ruin in stride. Fully aware of his own potential, he turned westward. Tradition maintains that he took nine-year-old Salmon Portland Chase of Keene along with him on the journey, as the boy's recently-widowed mother wished to place him under the instruction of his uncle, Philander Chase, Episcopal Bishop of Ohio. Young Chase eventually became Chief Justice of the Supreme Court, and presided over the trial of Jefferson Davis and the impeachment proceedings against President Andrew Johnson. He won posthumous fame when his portrait was selected to appear on the \$10,000 bill.

The subsequent career of Henry Rowe Schoolcraft has dimmed his early association with glassmaking. He explored southern Missouri and Arkansas, pioneered in studies of the North American Indians, became a member of the Michigan Territorial Legislature, helped to found that state's historical society, negotiated a treaty with the In-



*Glassware in front row made by Marlboro Street factory—
tumbler & decanter under Schoolcraft in 1816; flask by a
later concern; two rear decanters of unknown origin*

dians whereby 16,000,000 acres of land were added to the U. S. and authored many works, ranging from an autobiography to *A View of the Lead Mines of Missouri*. It was he who inspired Longfellow to write *Hiawatha* and a few years before his death in 1864, he began preparation, under a Congressional appropriation, of an elaborate work entitled *Ethnological Researches Respecting the Red Man in America*.

Though there is no indication that Schoolcraft ever returned to Keene, that town never forgot his contribution to its early industry and, 36 years after his departure, invited him to partake in the village's 100th anniversary celebration of the acceptance of Governor Wentworth's charter of Keene.

His ex-partner, Nathaniel Sprague, first turned to schoolteaching and later was ordained into the Episcopal ministry, his parishes including Royalton, Vt., and in New Hampshire, Drewsville and Claremont, where he died in 1853. His sister Elizabeth, who had been associated with Miss Fiske's School for many years, remembered him with a memorial window in Keene's St. James Episcopal Church.

Though Schoolcraft and his partners failed financially, artisti-



*Masonic flasks—with HS (Henry Schoolcraft)
and its later adaptation to JP (Justus Perry)*

cally they triumphed. As the McKearins pointed out, they had begun New England's first flint glass factory outside of the Boston region. Young Schoolcraft's interest in flint glass was one of the factors that led him to Keene and it follows that one of the most graceful pieces ever to come from the Marlboro Street glass factory was made during his superintendency. This is a flint glass decanter resting on a circular foot, with two applied tooled rings around the neck and a cut mushroom type stopper. The body is elaborately decorated with quilling alternating with applied strawberry prunts. It is, indeed, a specimen to rival the finest pieces of early blown glassware. Not a commercial product, doubtless too costly to produce during those strained years of low prices, it was brought home by Nathaniel Sprague and remained in his family as a memento of the art of glass blowing. For the trade the factory turned out flint glass tumblers, less ornate decanters, bottles and flasks, though the only type of the latter unquestionably made in Keene during Schoolcraft's ownership was the Masonic one bearing the initials HS in an oval frame. A chapter of the Royal Arch Masons was established in Keene in 1816 and young Schoolcraft, who so proudly placed his initials on the flask, had become a Mason at Salisbury, Vt., in 1814. However, this was but the first of many Masonic flasks to emanate from the Marlboro Street factory; more of this type were made than any other, their production not ending until around 1829 or 1830. What, if any, other flasks were made from 1815 to 1817 is uncertain. The Masonic is the only one identified by initials.

A fascinating footnote to the history of the Masonic flask is the incident related by New Hampshire author George Woodbury in a 1967 newspaper article. He recalls that one of these hand-blown whiskey flasks was carried to South Africa by a missionary, Rev. Alex

E. Wilson. Traveling into the wild hinterland, he met a zealous Mason who became so intrigued with the Keene flask that the Reverend gave it to him. Two years later Piet Retief, a stalwart, highly-respected Boer leader in the Great Trek, was made a present of this same flask. While attempting to purchase land from the warlike Zulus, Retief and 70 of his "Voortrekkers" with their servants, were accused by the chief of stealing cattle. Knowing his Boers were innocent, Retief realized the livestock must have been taken by a rival chieftain. He managed to secure their return but, while watching an entertainment arranged by Dingaan, the Zulu chief, the entire Boer delegation was speared to death in a war dance turned massacre. The next year, 1838, 460 Boers vanquished the Zulus and erected a church in which Christian burial was given to the bones of Retief and his men. The unharmed Keene Masonic was found in Retief's pouch bag and it is still preserved as an honored relic in the votive church in Pietermaritzburg, South Africa.

With the arrival on the scene of the merchant Justus Perry, things took a different turn. Writing of glassworks in New Hampshire a short time later, Henry Rowe Schoolcraft pompously reported: "The Flint works, after having attained a perfection in its



Sunburst—note spelling Keen instead of Keene

production, which is perhaps nowhere surpassed, is at present discontinued."

In March of 1817 Perry was advertising: "Bottles at wholesale—a complete assortment of glass bottles is now ready for sale . . . and at much lower prices than the Hartford Bottles have been selling in this part of the country, packed in crates. . . . Orders from any part of the country will be promptly attended to, and any kind of bottles will be manufactured in the shortest notice. No ware will be retailed at the Factory."

On February 18, 1819, the following notice was issued: "Justus Perry's Glass Bottle Factory now in operation. 100 crates on hand."

Perry, born in 1788 in Marlborough, a town a short distance from Keene, had arrived here in the fall of 1812 accompanied by his mother and her young children. He succeeded Sparhawk and Davis in a store on the east side of Central Square. In 1814 he became one of the original 13 proprietors of the window glass factory and when the flint glass business faced ruin, he bought it at a fraction of its worth. According to one local historian, of all who engaged in the local glass industry Justus Perry was the one who turned it to best financial advantage. His sharp business sense correctly interpreted the market for glass—he shifted from the manufacture of flint glass to the less expensive green-glass ware, including various types and sizes of bottles. By May 1820 he was advertising bottles, fluted flasks, inkstands, blacking and snuff bottles.

From the time Perry assumed control, the Marlboro Street glass-works, though operating under a variety of firm names through the years, was actually a family affair. On September 14, 1822, came the newspaper announcement that on the 12th of that month Justus Perry was succeeded in business (both the factory and the store) by the firm of Perry and Wood; John Vose Wood had married Perry's sister the previous April.

On November 14, 1823, their ad mentioned bottles only and in the 1827 village register, published in the local newspaper, the firm was listed as a "bottle manufactory." In September 1828 this partnership was dissolved by mutual consent and the company carried on under the name of Perry and Wheeler, Sumner Wheeler being Perry's younger half-brother. Evidently the production of green-glass ware found a ready market, for the factory was doing very well and by November Justus Perry was planning expansion: "The undersigned will receive proposals for the laying of a rough stone wall for a glass factory building. Said walls to be 100 feet long, 50 feet



*Blown three mo'd decanters, or bottles,
in heavy dark glass*

wide, 16 feet high and 2½ feet thick, to be laid in lime mortar. The materials to be delivered near the spot, to commence about the first of April next. Also for finding the materials and putting on the roof to said building, or the timber." Before long a large and substantial stone building replaced the earlier wooden structure and bottles of every description found their way to a growing market. Blown three mold glass, America's ingenious inexpensive answer to the fashionable high-priced cut glass, was also manufactured here, the principal commercial items being inkwells and quart and pint decanters. This output continued until the introduction of pressed glass at other factories caught the public fancy and interest in blown three mold ware declined.

On August 20, 1830, came word from the local paper that two days previously Perry and Wheeler had taken into co-partnership Quincy Wheeler; henceforth the business would be known as Perry, Wheeler and Co. Quincy was 21, the younger brother of Sumner, and half-brother of Justus Perry. It is significant of the close family relationship which must have existed that Justus Perry brought his mother and her young children with him to Keene and supported them. Later, when Sumner and Quincy each attained his majority, they were taken into partnership.

In Keene's 1831 directory Perry, Wheeler & Co. advertise: ". . . almost all kinds, shapes and sizes of black and light green bottles: containing from 4 ounces to 10 gallons, which they offer for sale as low as can be obtained at any other establishment in the United States. All orders by mail or otherwise, will be promptly ex-

ecuted. . . .” At this time six glass blowers were listed in the directory as working for Perry, Wheeler & Co.

In an 1832 report to the government concerning their factory, the firm reported \$6,000 as the value of real estate, with \$2,800 as the annual value of the materials they used which were produced in the United States and \$1,000 as the value of foreign materials (clay from Holland and foreign salt) consumed each year. The only product listed was glass bottles; their valuation of yearly output was \$16,000, most of which was purchased in the U. S. though a small portion was shipped to South America. At this time the factory employed 30 men, 8 boys under the age of 16, and 6 women and girls.

A notice dated September 1, 1835, announced the dissolution of the firm of Perry, Wheeler & Co. by mutual consent; business was to continue under the name of S. & Q. Wheeler. Though Perry's name disappeared from the firm, there is evidence that he continued at least a brotherly interest as his will included signed statements from various members of the family releasing all claims on the glass factory to Sumner Wheeler. These were dated 1839 and 1841, a time when the Marlboro Street Factory was running into difficulties, faced with both a national business depression and locally the rise of the temperance movement. By March of 1842, 1,382 Keene names were pledged in Total Abstinence, which was more than half the population!

Quincy Wheeler died, aged 30, at the American House in Boston, in January 1839. His remains were conveyed home and committed to the tomb, attended by numerous relatives and friends. He died intestate; his brother Sumner was named administrator, and the latter's inventory of the real estate belonging to the factory shows:

Factory lot containing factory ware houses, 5 dwelling houses and

12 acres of land in Keene

Foster house and lot (evidently where Joseph Foster, the glassblower, lived)

Holt lot (19 acres North Woods)

30 acres in North Woods, mostly cleared

7 acres, 83 rods Beech Hill

15½ acres Tenant Swamp

6 acres, 32 rods in Tenant Swamp, lot of Coolidge

Nims lot, 7½ acres

Under personal estate were included the customary items necessary to a glass manufactory—clay, pot shells, bottle molds, sleighs, wagons, horses, white lime, Dorset sand, blowpipes and shears, straw

and clay pipes. The listing of bottles on hand indicated both a wide variety and an amazing number, including: 82,800 pint flasks, 75,600 half-pint flasks; 3,168 junk bottles; 3,168 pint bottles; 23,328 half-pint bottles; 30,240 eight oz. bottles; 30,528 six oz. bottles; 14,688 four oz. bottles; 19,320 half-pound snuff bottles; 21,000 square blacking; 192 two-gallon bottles; 240 one-gallon bottles; 432 half-gallon bottles; 300 quart bottles; 480 pint bottles; 10,080 no. 1 inkstands; 12,240 no. 2 inkstands; 600 quart jars; 1,500 gallon demijons; 13,010 gallon demijons; 9,900 half-gallon demijons; 3,312 half-pound green mustards; 3,168 green. fancy mustards; 5,760 opodeldoc phials; 864 eight oz. phials; 6,480 six oz. phials; 7,632 four oz. phials; 4,032 two oz. phials; and 2,448 one oz. phials. It was evidently the policy, as in many other glass manufactories, to keep making bottles regardless of the market's decline.

By now business was steadily deteriorating and although Sumner Wheeler was one of Keene's highest taxpayers in 1840, he could ill afford a losing proposition. A local newspaper item, dated 1841, cites pint and half-pint bottles, once a source of handsome revenue, were now almost without a market. Wheeler contracted to discontinue his manufactory (keeping the store that had been part of the business



*Keene as it appeared during the closing years
of the glass industry*

since Justus Perry first took over) in favor of a company organized by Joseph Foster, who, in 1842, established the first glassworks in Stoddard. Foster, one of the Marlboro Street Factory's outstanding glass blowers for many years, was born in 1801 in England, where he learned the art of glassmaking at an early age. Emigrating in his youth, he married Mary Sanders of Swanzey, N.H., in 1824. Exactly what date he began working in Keene is not known, though he is named in the 1831 directory (the first complete listing of the town; the second one was not issued until 40 years later) as a glass blower in the employ of Perry, Wheeler & Co. As he was one of their best workers, it is not surprising that he was anxious to set up his own factory when business reverses spelled the end for the Marlboro Street works. Unfortunately, he, too, found the going difficult and his venture ended in failure.

At the time Sumner Wheeler sold his glassmaking business, the Window Glass Factory was still operating on Washington Street. It was to continue for another decade and then the glassmaking furnaces in Keene were banked for all time, ending a splendid chapter in the up-and-down years of an early domestic industry. Its wares, both commercial and those pieces made by blowers exercising their skills in the art of glassmaking for their own use, are now eagerly-sought collector's items and on display in various museums.

Some Museums with Collections of Keene Glass:

The Bennington Museum, Bennington, Vt.
The Corning Museum of Glass, Corning Glass Center, Corning, N. Y.
The Currier Art Gallery, Manchester, N. H.
Metropolitan Museum of Art, New York City
Old Sturbridge Village, Sturbridge, Mass.
The Toledo Museum of Art, Toledo, Ohio.
The Henry Francis du Pont Winterthur Museum, Winterthur, Del.

Flasks Made at the Marlboro Street Factory, with
Approximate Dates of Manufacture:

Masonic—1816 to 1830
Sunburst: Type of GVIII—1, circa 1815-20; Type of GVIII—8, etc.
—circa 1822-30.
Eagle—1820 to 1830
Success to the Railroad—late 1820's
Washington-Jackson—late 1820's
Cornucopia: 1) Eagle reverse; 2) Urn reverse—circa 1830