## PRE-CIVIL WAR TINSMITHS AND EARLY GLASS COMPANIES

The manufacture of railroad lanterns was in its infancy prior to the Civil War, and lantern manufacturing was primarily done by glass manufácturers or individual tinsmiths. To list every tinsmith here who made lanterns during that period would be a near impossible task. We have listed those that were uncovered during our research, but we make no pretense of this being a complete list of manufacturers during that period. After the Civil War "Railroad Fever" hit the United States causing rapid railroad expansion and the development of railroad lantern manufacturing as an industry.

## NEW ENGLAND GLASS COMPANY

The New England Glass Company was incorporated February 16, 1818 by Amos Binney, Edmund Munroe, Daniel Hastings, and Deming Jarves. They located their new business in Cambridge, Massachusetts at the site of the defunct "Emmet, Fisher and Flowers", a glass company
Figure 3.1 (Right) - Marked fixed globe lanterns were common in New England and eastern New York, but rare outside that area. The easy conclusion on this "P.R.R." marked New England Glass Company lantern (NEG-1) is that it was from the Pennsylvania Railroad. However, based on known history of the lantern, it is probably from the "Passumpsic Railroad", the common name used by the "Connecticut and Passumpsic Rivers Railroad".

Collection of Richard Barrett
and the defunct Boston Porcelain and Glass Company, a defunct porcelain company.


Amos Binney was a U.S. Navy agent at the Charlestown Navy Yard. Edmund H. Munroe and Daniel Hastings had been directors of the Boston Porcelain and Glass Company. Deming Jarves had been clerk of the Boston Porcelain and Glass Company.

Because they started out in an existing factory, and because Deming Jarves proved to be an extremely effective sales manager; they quickly developed a reputation for having one of the most extensive facilities for the manufacture of flint glass in the country. Deming Jarves remained with the firm only until 1825 when he left to supervise the construction of a new glass factory at Sandwich, Massachusetts.

The New England Glass Company began making fixed globe railroad lanterns in the early 1850s. A


Figure 3.2-The metal bracelet has given way to a wire bail in this New England Glass Company tinned steel lantern (NEG-2) which is cut on the 7" high globe "B\&MRR" (Boston and Maine Railroad).

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very small number of railroad lanterns exist with "PATENT APPLIED FOR N. E. GLASS CO." marked on them. A larger quantity of similar lanterns marked "N. E. GLASS Co./PATENTED OCT. 241854 " also exist. The company, assumedly, made the metal parts of the railroad lanterns also, as they had their own metal or trimming shop. We do not know when they ceased manufactuting fixed globe railroad lanterns, but it was probably sometime between 1875 and 1880. They also made removable globe lanterns, probably beginning in the late 1860 s or early 1870 s.

The company remained prosperous through the Civil War years. Employment reached its greatest point in 1865 when 500 men and boys were employed. At about that time lime glass was introduced to the marketplace. Since it could be


Figure 3.3-This New England Glass Company fixed globe lantern (NEG-3) has a red cut "E.R.R." (Eastern Railroad) globe The lantern has a drop fount and is marked "PAT'D OCT 24, 1854".

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Figure 3.4- This New England Glass Company fixed globe lantern (NEG-4) has the bail attached to the side, rather than the top, of the smoke dome. Note also in these New England Glass Company lanterns the many different globe shapes. Cut into the globe are the initials " $B \& A$ " (Most likely Boston and Albany Railroad). The lantern carries a patent date of October 12, 1854.

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made for a third or a quarter of the price of flint glass, it began to steal the market away from flint glass. The New England Glass Company decided to continue making only high quality flint glass.

In 1878 the plant was leased to William L. Libbey who had been the sales manager. Mr. Libbey's son Edward D. Libbey had also been working for the New England Glass Company. In 1880 Mr . Libbey's son became his partner and thereafter the company was known as the New England Glass Works, WilliamL. Libbey and Son Proprietors. When the elder Libbey died in 1883, his son became the head of the firm.


Figure 3.5 - The Portland, Saco, and Portsmouth Railroad bought this fixed globe lantern (NEG-5) from the New England Glass Company. The globe is cut "P.S.\&P.R.R.". The fount is the "twist-off" variety with a glass oil cup.

## Collection of Stan Roberts

By 1888 glass prices had fallen because of increasing western competition. The final blow was a strike. This combination caused Mr . Libbey to close the firm. He moved to Toledo, Ohio where he established the Libbey Glass Company. He later established the Owens Bottle Machine Company. The plant was sold in 1894 to the West End Street Railway. By 1921 all of the buildings had been torn down

Some New England Glass Company tooling was, apparently, sold as New England Glass loose globe railroad and marine lantern look-alikes exist with at least two other makers names.


Figure 3.4-This New England Glass Company fixed globe lantern (NEG-4) has the bail attached to the side, rather than the top, of the smoke dome. Note also in these New England Glass Company lanterns the many different globe shapes. Cut into the globe are the initials " $B \& A$ " (Most likely Boston and Albany Railroad). The lantern carries a patent date of October 12, 1854.

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Figure 3.6-This Boston and Worcester Railroad lantern (NEG-6) was manufactured by the New England Glass Company. The globe is cut "B\&WRR". Since the Boston and Worcester Railroad and the Western Railroad were consolidated in 1867 to form the Boston and Albany Railroad, we can confidently state that this lantern was made during or before 1867. Note that this lantern does not have the characteristic dagger cutouts in the smoke dome. New England Glass Company lanterns having this hole pattern are believed to have been made prior to 1853.

> Collection of Stan Roberts

## HENRY N. HOOPER AND COMPANY

Henry N. Hooper and Company were located on Causeway Street in Boston, Massachusetts in the 1850s. They manufactured spikes, castings, bells, locomotive lanterns (headlights), chandeliers, girandoles candelabra and lamps. Besides the manufacturing facility on causeway Street,


Figure 3.7-The New England Glass Company manufactured this lantern (NEG-7) for the Atlantic and Saint Lawrence Railroad. The Atlantic and Saint Lawrence operated from 1848 to 1853 before being leased by the Grand Trunk Railway of Canada. The vers early cast globe is marked "A\&SI.RR".

Collection of Stan Roherts
there was also a sales outlet on Commercial Street. They continued in business at least through 1867.

## BROOKLYN FLINT GLASS WORKS <br> CA. 1820 TO 1868

The Brooklyn Flint Glass Works was started by John Loftus Gilliland during the early part of the 1820s. In 1864, Amory Houghton sold the Union Glass Company in Somerville, Massachusetts and bought the Brooklyn Flint Glass Works. In search of cheaper raw materials he moved that business in 1868 to Corning, New York and changed the name of the business to the Corning Flint Glass Works.


Figure 3.8 - The New England Glass Company also produced "loose globe" lanterns. This brass top, bell bottom lantern (NEG-8) is marked "B\&ARR". The red, cut, barrel globe is marked "C.R.RR" (Connecticut River Railroad). In the same collection is a identical lantern marked as being made by Tucker and Crawford (TUC-1). We have no additional information on Tucker and Crawford.

Collection of Tom Walsh

Early fixed globe lanterns bearing the name Brooklyn Flint Glass Works (on the metal portion of the lantern) exist (See Figure 3.12). This is an indication that the business had metal working capability along with glass making capability.

Since some Brooklyn Flint Glass Works lanterns utilize the 1851 Sangster patent, manufacture of the lanterns probably began in the mid 1850s and continued until 1868


Figure 3.9-This New England Glass Company fixed globe lantern (NEG-9) appears to be entirely hand made. It may have been made as a prototype. Note that the lantern has oak leave shaped holes cut into the smoke dome where many New England Glass Company lanterns have curved daggers.

Collection of Tom Walsh

OLCOTT \& BROTHER - 1855 TO 1861 MILTON OLCOTT - 1861 TO 1861

Olcott \& Brother, run by Milton Olcott and his brother, was one of the earliest of Rochester's lamp manufacturers. They made locomotive lamps from 1855 to 1861 . They were described on an advertising coin of the period as being "manufacturers of Locomotive Conductors SignaI \& Other R.R. Lamps". In 1861, the name was changed to Milton Olcott. We have found no ref-
erence to this business after 1861. Neither have we found any examples of their products.

- ROACH \& STRONG - 1857 TO 1859

ROACH \& MATTISON - 1859 TO 1861

Roach \& Strong 's abilities at making railroad lanterns were described in the November 16, 1857 (Rochester, New York) Union Advertiser. That article under the headline of "Beautiful Hand Lamp" read as follows:


Figure 3.10 - The New England Glass Company produced many different railroad lantern styles. This lantern (NEG-10) was made for the Boston and Maine Railroad. As with most fixed globe lanterns, the railroad markings are on the glass rather than in the metal. The clear globe is cut "B.\&M.R.R."

Collection of Richard Barrett
"We were shown on Saturday a rare specimen of a hand lamp, or globe lantern, for the use of railroad men. While it's proportions were comely, and it's workmanship gave evidence of mechanical skill, what was most striking was the composition of the article. All the metal was of the new French composition called orside. This metal resembles gold and is easily burnished to a high lustre. This lamp was made by Messrs. Roach \& Strong of this city, and with three of the same kind, are to fill an order from Cuba. The lamp we saw was for the President of a Cuba Railroad and had his name engraved upon it. Messrs. R \& S,


Figure 3.11 - Both of these lanterns are believed to have been made by the New England Glass Company for the Connecticut River Railroad. The lantern on the left (NEG-11) is not marked with a manufacturer's name. The globe is cast "CRRR" and probably pre-dates 1854. The lantern on the right (NEG-12) also has a cast "CRRR" globe, and a bail attached to the side of the smoke dome.

Collection of Tom Walsh

Figure 3.12-(Right)This beautiful, all brass, fixed globe lantern (BRO-1) was manufactured by the BrookIyn Flint Glass Works.

> Collection of
> Tom Walsh



Figure 3.13-Roach \& Strong produced this fixed globe bell bottom lantern (R\&S-1). The metal of this lantern is neither brass, nor tinned steel. It has a very dark orange-brown color and may very well be "orside". The tubing soldered to the top of the smoke dome was added when an insensitive owner electrified the lantern. Although not visible in this photo, the reflector has a machined hole that is believed to have been a finger warmer. Collection of Richard Barrett
are the first, we are told, to introduce the new metal into the manufacture of lamps. In so doing they exhibit a commendable enterprise. Their establishment is at 208 State St., where they do a general tin and coppersmith's business as well as manufacture Roach's celebrated conductor's and brakemen's lamps and Railroad and Steamboat signals. They are receiving and filling orders for their work from not only all parts of the Union, but from foreign countries, as the above named order indicates."


Figure 3.14-Roach \& Mattison produced this beautiful brass top fixed globe lantern ( $\mathbf{R \& M}-1$ ). The bail and guard wires are also brass. Note the similarity of parts between these two lanterns even though the Roach and Mattison is significantly larger than the Roach and Strong lantern.

## Collection of Richard Barrett

Mr. Strong disappeared from the firm in 1859 and shortly thereafter G. Mattison became the new business partner of Willam E. Roach.

This partnership, too, was to have a limited life as William E. Roach became, in 1861, a Union Officer in the Civil War.

Lieutenant Roach was reported missing after the Battle of Reams Station and was taken prisoner near Petersburg.

AMOS W. SANGSTER HUGH SANGSTER JAMES SANGSTER CHARLES SANGSTER

Hugh Sangster was born in Quebec on June 27, 1790. He moved to Buffalo in 1834, where be set up business as a tin and coppersmith. He left Buffalo for a period of time, moving to Newark, Ohio, but returned after 1840. He and his wife had eleven children including James Sangster, Amos W. Sangster, and Charles Sangster.

Hugh Sangster, of Buffalo, New York, received his first lantern patent on December 18, 1849. He, along with James Sangster, received a second lantern patent on June 10, 1851.

Other patents issued to the Sangsters were to Hugh Sangster on August 22, 1854, to ? Sangster on March 25, 1862 and to Hugh Sangster on May 28, 1867. The Sangster patents were used by many lantern manufacturers. Thus, it is not possible to conclude that a lantern marked "Sangster's Patent" was made by the Sangsters.

Hugh Sangster appears in Buffalo city directories as a tin and copper smith or as a lamp maker from 1849 (possibly earlier) until the early 1860s. We then see him as a patent agent in 1866 and a tinsmith through 1868. By 1868, Hugh was sev-enty-eight years old. We surmise that he retired from business at this point or possibly died.

James Sangster was born in Kingston, Ontario Canada. As a child he came, with his parents to Buffalo. For some years he worked for his father and in partnership with his brother Amos W. Sangster. He then went to New York City where he studied sculpting and mechanical engineering. In 1863 he entered the business of helping others to secure patents, a business he continued in for the remainder of his career.


Figure 3.15-The underside of the bell bottom of this star-diamond-star pattern fixed globe lantern shows a typical Sangster patent marking. A more conventional photo of this lantern is shown in Figure 3.16. Collection of Gordon Alling

Amos W. Sangster was born in Kingston, Ontario Canada on February 5, 1833. As a youth he worked in the lantern business with his father and was in partnership with his brother James. However, he later became a talented and prominent artist working in such mediums as wood engraving, oils, and water-colors. He died on April 23, 1904.

Charles H. Sangster was also a son of Hugh Sangster, but we have been unable to locate any biographical information on him.

## THE STAR-DIAMOND-STAR PATTERN

A significant number of fixed globe lanterns have the star-diamond-star (SDS-XX) pattern of holes in the smoke dome. These lanterns do not seem to ever be marked with a manufacturers name. Most of the lanterns have a japanned finish, and it is likely that all of these lanterns were, originally, provided with a japanned finish. They


Figure 3.16 - (Above) The New York and New Haven Railroad bought this brass, fixed globe, drop fount star-diamond-star pattern lantern (SDS-1). The lantern has a seven inch clear, cast globe which is marked "NY\&NH". The bottom of the bell bottom is shown in Figure 3.15. It is stamped for the Sangster 1851 patent on the fount release springs.

Collection of Gordon Alling Figure 3.17 - (Above right) Another star-dia-mond-star fixed globe tinned steel lantern with guard wires (SDS-2) is shown above. The red cased (flashed) globe is cut "C.R.R." (probably Concord Railroad). The rolled edges of the globe are not flashed.

Collection of Tom Walsh Figure 3.18-(Right) This star-diamond-star tinned steel, fixed globe lantern (SDS-3) has a green globe which is cut "N.R.R." (probably Northern Railroad of New Hampshire). It uses the Sangster patent on the drop fount.

Collection of Stan Roberts




Figure 3.19 - (Upper left) This star-dia-mond-star pattern, fixed globe lantern (SDS-4) has a tinned steel frame with a japanned finish. The globe is cast "BC\&MRR" (Boston, Concord and Montreal Railroad).

## Collection of Tom Walsh

Figure 3.20 - (Upper Right) The Manchester and Lawrence Railroad bought this star-dia-mond-star fixed globe lantern (SDS-5) with japanned finish. The cut globe is marked "M\&LRR".

## Collection of Richard Barrett

Figure 3.21 - (Lower left) This star-dia-mond-star pattern fixed globe lantern (SDS-6) has a solid red (cranberry) globe . cut "C.R.R." (Probably Concord Railroad).

Collection of Stan Roberts





Figure 3.22-(Upper left) This star-dia-mond-star pattern fixed globe tinned steel lantern (SDS-7) has a solid red, cut globe marked "C.M.\&L.R.R."

Collection of Stan Roberts
Figure 3.23 - (Upper right) The Vermont Central Railroad purchased this star-dia-mond-star tinned steel fixed globe lantern (SDS-8). The drop fount has Sangster springs and is stamped with Sangster patent information. The clear, cut globe is marked "V.C.R.R."

## Collection of Stan Roberts

Figure 3.24 - (Lower left) This star-dia-mond-star pattern fixed globe, tinned steel lantern (SDS-9) has a clear, cut globe marked "CRR" (Probably Concord Railroad).

> Collection of Richard Barrett


Figure 3.25 (Upper left) This tinned steel, fixed globe, star-diamond-star lantern (SDS-8) has, "C.O. BAKER" (Curved over a decorative pattern), and the railroad initials, "M.C.R.R." cut into the clear globe. Collection of Stan Roberts Figure 3.26 (Upper right) Another type of star-diamond-star lantern (SDS-10) is this tinned steel fixed globe version with twist-off fount and glass oil cup. The globe is cut "P.S.\&P.R.R."

## Collection of Stan Roberts

 Figure 3.27 (Lower right) This tinned steel fixed globe lantern (STP-1) is from the Old Colony and Newport Railroad. The solid red cut globe is marked "O.C.\&N.R.". Compare the metal base with those of other New England Glass and star-diamond-star lanterns. These star pattern lanterns which are not marked with a manufacturers name are probably products of New England Glass.Collection of Richard Barrett



Figure 3.28 - An all brass star pattern lantern (STP-2) is shown in this photo. The solid red globe is cut "Geo. B. Randall". A 1909 Boston and Maine Railroad seniority roster confirmed that George B. Randall was a high seniority employee working on the Connecticut \& Passumpsic Rivers Division. Note that the bell bottom of this lantern has been trimmed back with a pair of tin shears.

Collection of Richard Barrett
all seem to be marked for New England railroads. A comparison of the metal work indicates that they were probably manufactured by the New England Glass Company but, since this can not be confirmed, we have identified them separately.

We have included photos of several types of this interesting style lantern in Figures 3.16 through 3.26 .


Figure 3.29-This brass top, fixed globe lantern (UNK-1) is unusual in that it has a double brass top and railroad lettering that is cut vertically into the globe rather than horizontally around the globe. The cut globe is marked "C\&P.RR." (Concord and Portsmouth Railroad).

> Collection of Richard Barrett

## THE STAR PATTERNLANTERNS

Figure 3.27 and 3.28 show fixed globe lanterns which are not marked with any manufacturers name. They do, however, show an amazing similarity to New England Glass Company and star-diamond-star pattern lanterns when you compare the construction of the metal portions of the lanterns. While we can not prove that these lanterns were manufactured by the New England Glass Company, the similarities certainly suggest that as a strong possibility.


Figure 3.30-(Upper left) This Northern Central Railway fixed globe lantern (UNK-2) also has a double brass top. The clear cast globe is marked "N.C.R.W.". This lantern has soldered caps on top of the guard wire ends. Guards were far more common on fixed globe lanterns made in New York than on those made in Massachusetts.

Collection of Tom Walsh
Figure 3.31-(Upper right) " $R \& B R R$ " is cut into the clear globe of this fixed globe, guarded lantern (UNK-3).

Collection of Dave Thompson Figure 3.32 - (Lower right) "ST.L.A\&CRR" is cut into the clear globe of this fixed globe, guarded lantern (UNK-4) which has a drop fountusing Sangster springs. It is marked for the Sangster 1851 patent. This does not mean that the lantern was made by Sangster. It simply means that the unknown manufacturer made use of the Sangster patent.

Collection of Dave Thompson




Figure 3.33-(Upper left) "Penn Erie RR Co." is cast into the clear globe of this tinned steel, fixed globe lantern (UNK-5) Collection of Tom Walsh

Figure 3.34 - (Upper right) "C.R.R." (Probably Concord Railroad) is cut into the clear globe of this brass top, fixed globe lantern (UNK-6). The twist off fount has a glass oil cup.

Collection of Stan Roberts

Figure 3.35-(Lower left) This very unusual brass top, fixed globe lantern (UNK-7) is marked "LVRR" (Lehigh Valley Railroad) on the rotating metal band that allows access for lighting the lantern. The clear globe is not marked.

Collection of Richard Barrett


Figure 3.36-Two Boston and Worcester Railroad tinned steel, fixed globe lanterns of unknown makers are shown in this photo. The lantern on the left (SDS-11) is the star-dia-mond-star pattern and has a clear cut globe marked "B\&WRR". The lantern on the right (UNK-8) has a cast, clear globe marked " $B \& W$ " over " $R R$ ".

Collection of Tom Walsh

Some star pattern lanterns were marked with the railroad name stamped in the metal of the smoke dome as is the lantern shown in Figure 3.39.


Figure 3.37-The Grand Trunk Railway purchased this tinned steel, fixed globe lantern
(UNK-9). The blue cut globe is marked "G.T.R.).

Collection of Tom Walsh

## OTHER UNKNOWN MANUFACTURERS

Many early railroad lanterns were not marked with the name of the manufacturer. We have included a series of photographs (Figures 3.29 to 3.38 and Figures 3.41 to 3.42 ) and identified these lanterns using the code "UNK-XX".

Figure 3.38 (Right) - This globe is believed to be from an unidentified fixed globe lantern (UNK-14). The globe has the initials "F.R.R.R." (Fall River Railroad) cast into it. Collection of Tom Stranko



Figures 3.41 and 3.42 - The manufacturer of this fixed globe lantern (UNK-13) is unknown. The frame is marked on top "G.T.R". The clear, cast globe is marked "GTR".

Collection of Tom Stranko


Figures 3.39 and 3.40-This "Star pattern" lantern (STP-3) is stamped "C.R.R" (Concord Railroad) on the side of the smoke dome. The red flashed globe is unmarked. Collection of Tom Stranko


