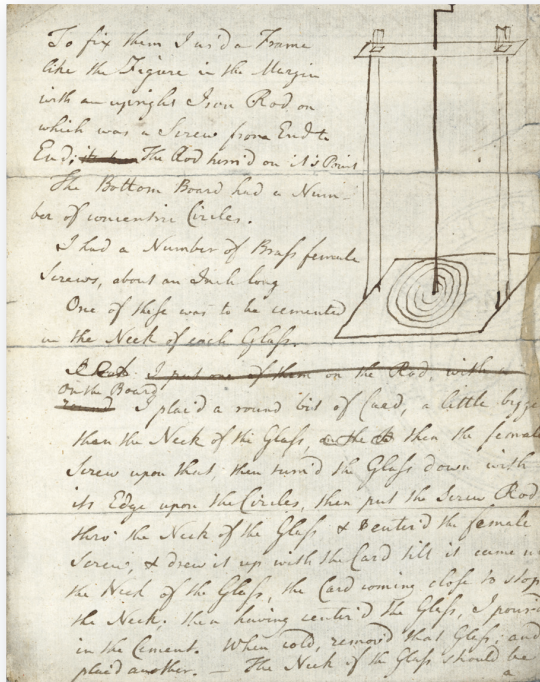


GLASS MUSICAL INSTRUMENTS

Fiona Tait



Benjamin Franklin's instructions for making 'Glasses Musical'. From the Archives of Soho [MS 3782/12/108/9], Library of Birmingham.

The archives relating to the Soho Manufactory in Birmingham provide an insight into the many uses to which glass has been put. There are references to quadrant glass, painted glass, lamp glass, window glass, drinking glasses, spectacles, glass tubes, engraved glass to prevent forgeries, looking glasses, glass frames, glass houses, the glass trade, even isinglass (a substance obtained from the dried swim bladders of fish)! One of the more unusual mentions is of glass used to make musical instruments.

In a letter from Charles Clagget in Waterford, where he had a music warehouse, to James Watt in Birmingham, dated 16 January 1782, Clagget includes a sketch of an instrument called an 'Ado'. This was an instrument he had heard of in London, made with glass bars in a frame. Clagget asks about the costs for the bars. [MS 3219/4/94/1]

Benjamin Franklin, the American scientist, printer and politician (1706-1790) was also an accomplished musician. He could play the violin, cello, harp and guitar. In 1761 he heard a demonstration of music played in Cambridge, by Edward Delaval, FRS, on glass vessels filled with varying amounts of water. Franklin set to work to improve and refine this idea, creating a new instrument he called the 'armonica'.

Two papers in a notebook belonging to Matthew Boulton [MS 3782/12/108/9], in Franklin's hand, reveal some details of construction for 'Glasses Musical'. Thirty-six glasses were to be mounted on an iron spindle with screws set into their necks in cement, using cork as a buffer to prevent jarring. The glasses were to be ordered from Messrs Hughes & Co at the Cockpit Glasshouse, opposite St. Paul's [London] and the glasses were to be made with 'bottoms nearly even'.

According to descriptions of surviving instruments, the glasses were apparently tuned by their varying size, painted and each colour coded to a different note. The spindle was attached to a wheel and operated by a foot pedal. The armonica was played by moistening the fingers and touching the rims of the glasses.

The instrument became popular: Mozart, Bach, Beethoven and Saint-Saëns composed for it. The first person to give a public performance on the armonica was Marianne Davies (1744 – c. 1816) on 18 February 1762 in London.

Did Matthew Boulton ever order an armonica? Researchers welcome! ●

THE ARCHIVES OF SOHO

The Archives of Soho contain the business records of the firms of Boulton & Watt, steam engine manufacturers; the personal papers of Matthew Boulton (1728-1809) and family and records of his several businesses, including the Soho Mint; and the personal papers of James Watt (1736-1819) and family. These collections are held at Archives, Heritage and Photography in the Library of Birmingham. They form an incredibly rich source for the history of the industrial revolution, for discovering Birmingham's worldwide connections in the eighteenth and early nineteenth centuries, for the development of science and for a fascinating glimpse of society at the time.

www.libraryofbirmingham.com and enter Archives of Soho in the search box.

GEORGE PIERCY TYE'S GLASS BULB VASE

David Encill

George Piercy Tye's innovative glass bulb vase was patented and launched in

1850, just before The Great Exhibition, at which it was exhibited. It had a squat bulbous form with an elegantly shaped neck and 'cup', to support the bulb. A Birmingham-based die sinker and keen gardener, Tye was concerned about top-heavy hyacinths breaking their stems and overcame this by incorporating a groove in the rim of the cup, which in turn held a metal wire contraption that included clips to hold the flower. Although he produced two other bulb vases, the Mini and Tripod, his original design endures today. ●

Further Reading

Patricia Coccoris, *The Curious History of the Bulb Vase* (Cortex Design, 2012) www.hyacinthbulbvases.com

Cobalt-blue Tye bulb vase, showing how the flower stem was supported.



© Patricia Coccoris