

The Glass Armonica at The Royal College of Music – Sally James

Alice Kershaw, a colleague at Benjamin Franklin House, and I embarked on a trip to unravel a musical mystery. We travelled to the Royal College of Music (RCM) in South Kensington, London for an appointment with Bridget Cunningham. Bridget is a highly skilled harpsichordist, and a Junior Fellow at the College.

The museum is full of interesting and unique musical instruments from around the world, the oldest of which are from the early fifteenth century. Bridget explained the history behind many of the instruments and how they were acquired by the museum. Alice and I were most excited to finally discover an original example of a most curious instrument called the ‘glass armonica,’ which was invented by Benjamin Franklin at 36 Craven Street in 1761. Only a handful of the original eighteenth century glass armonicars have survived. Many of these can be found in private collections or museums across the world. However, according to my research while there are many examples of glass armonicars in America, only two original armonicars can be found England.

The glass armonica at the Royal College of Music was given to them by Sir George Donaldson in 1894. Displayed alongside the armonica is a recent donation of early nineteenth century musical glasses. Both instruments are based on a similar principle: glass bowls made to vibrate by running wet fingers around their rims. Benjamin Franklin, inspired by the sounds of musical glasses, used them as his model for the glass armonica. Musical glasses were placed in a wooden box, allowing the player to play one glass at a time. Franklin made a significant improvement by setting bowls ground to different octaves on their side affixed with a central metal rod and rotated by means of a foot treadle. Players then could use the whole surface area to produce different notes at the same time.



A set of musical glasses at the RCM



The Glass Armonica at the RCM

The spindle rotated by a wooden treadle. Originally the rims of the bowls, when spinning would have passed through a trough of water, in order to keep them wet. The rims of the bowls were painted bright colours to clearly distinguish different notes, much like the black and white keys on a piano today.

The armonica at the Royal College of Music consists of 25 glass bowls mounted on a horizontal spindle inside an oak and softwood cabinet. The bowls decrease in size, correlating to the note produced. This means that the larger and deeper the bowl, the lower the sound of the note. The

Unfortunately the Royal College's glass armonica cannot be played due to minor damages. Bridget pointed out that the footpad for the treadle is missing and the bowl for the highest note is broken. At Benjamin Franklin House, we have a working replica of an armonica. Our armonica has much smaller bowls and spins thanks to an electronic motor (Franklin would no doubt have approved) and is fully playable. The glass armonica is truly fascinating, and I thoroughly enjoyed viewing an original example!

For more information about the musical glasses or glass armonica at the Royal College of Music's Museum of Musical Instruments, I recommend arranging an appointment to visit the collection. For any more information about Benjamin Franklin House or our replica armonica please visit www.benjaminfranklinhouse.org.

Sally James

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