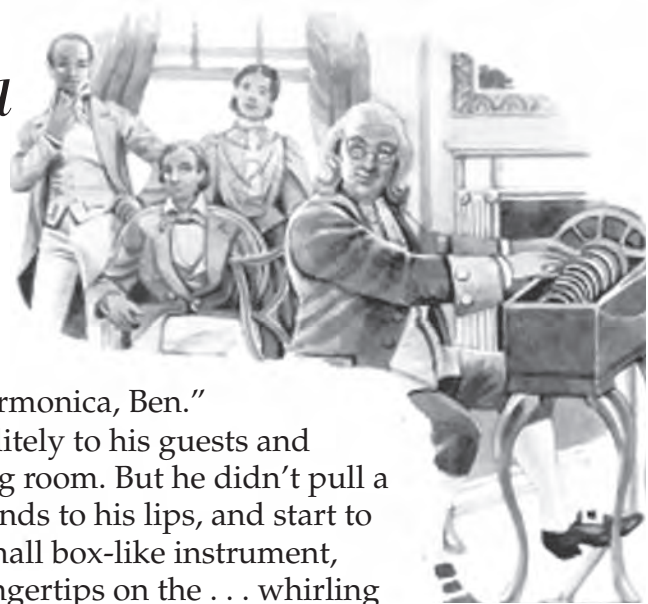


# Ben's Harmonica

by Barbara C. Wessinger

Illustration by Barbara Kiwak



“GIVE US A TUNE on your harmonica, Ben.” Ben Franklin nodded politely to his guests and sauntered across his drawing room. But he didn't pull a mouth organ from his pocket, cup his hands to his lips, and start to blow a tune. Instead, he sat down at a small box-like instrument, pumped its foot pedal, and placed his fingertips on the . . . whirling glass bowls!

Although we know him best as a statesman and scientist, Ben Franklin was also the first American to invent an important musical instrument—the glass harmonica, or *armonica* as Franklin called it. The glass harmonica consisted of a series of graded<sup>1</sup> glass bowls arranged one inside another along the length of a horizontal spindle. Pumping the foot pedal turned the spindle, rotating the bowls through a trough of water inside the instrument. The player applied his or her fingers to the wet rims of the bowls, producing soft, clear tones similar to the sounds you get when you run your finger around the wet rim of a water goblet.<sup>2</sup>

Ben got the idea for the glass harmonica after hearing a talented musician in London perform an entire concert on crystal glasses. Delighted by the dulcet<sup>3</sup> tones, Franklin began thinking of a better way to produce music on glass, something easier to play and transport than individual goblets with varying amounts of water inside. He built the first model of the armonica in 1761 and gradually perfected the instrument. To get tones ranging over three octaves,<sup>4</sup> Ben used thirty-seven glass basins in twenty-three assorted sizes; the thickness of the glass determined the variations in tone for same-sized bowls.

In 1764 a young musician, Stephen Forrage, gave the first glass harmonica concert in Philadelphia, and the audience is said to have admired the “sweetness and delicacy of tone” of the new instrument. For a while the glass harmonica became quite popular in both the United States and Europe. When an English musician, Marriane Davies, introduced it in Vienna in 1773, the seventeen-year-old Mozart was so intrigued<sup>5</sup> that he wrote a composition for the armonica, with parts for flute, oboe, viola, and cello.

<sup>1</sup> **graded:** put in order by size

<sup>2</sup> **goblet:** a glass

<sup>3</sup> **dulcet:** sweet-sounding

<sup>4</sup> **octaves:** several series of eight musical tones

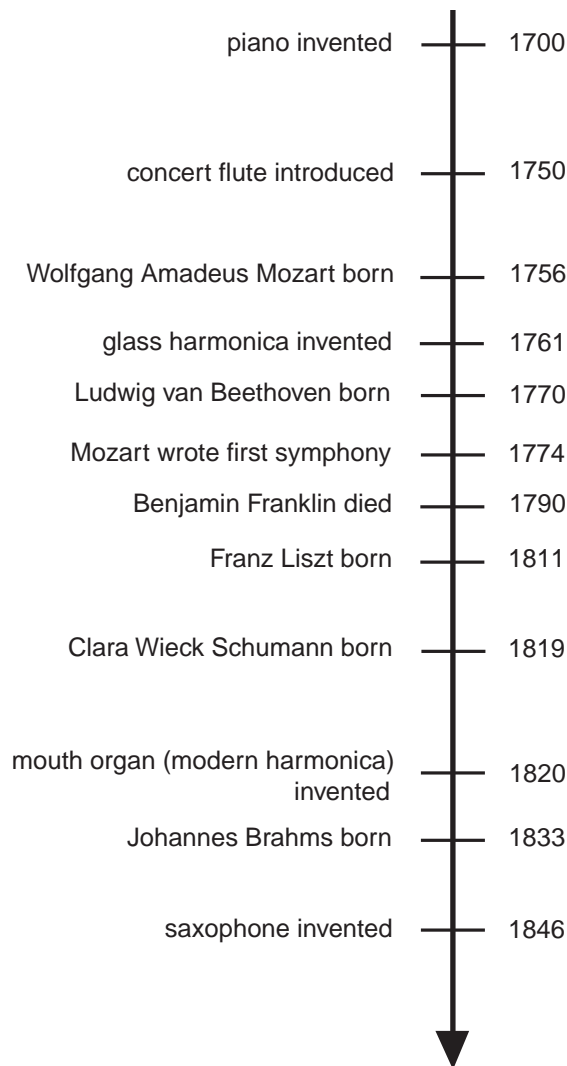
<sup>5</sup> **intrigued:** interested or curious

Although the delicate tones of the glass harmonica were perfect for drawing-room musicales<sup>6</sup> and garden party concerts, the instrument gradually faded from fashion as concert halls grew larger: its soft tones were practically impossible to hear in large auditoriums and theaters, especially over the booming brass of orchestras.



<sup>6</sup> **musicales:** small musical programs

## Time Line of Composers and Musical Events from 1700 to 1850



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