

# HPA

## TECH RETREAT 2024

Post-Retreat Treat:  
You Think You're Dealing  
with Change?

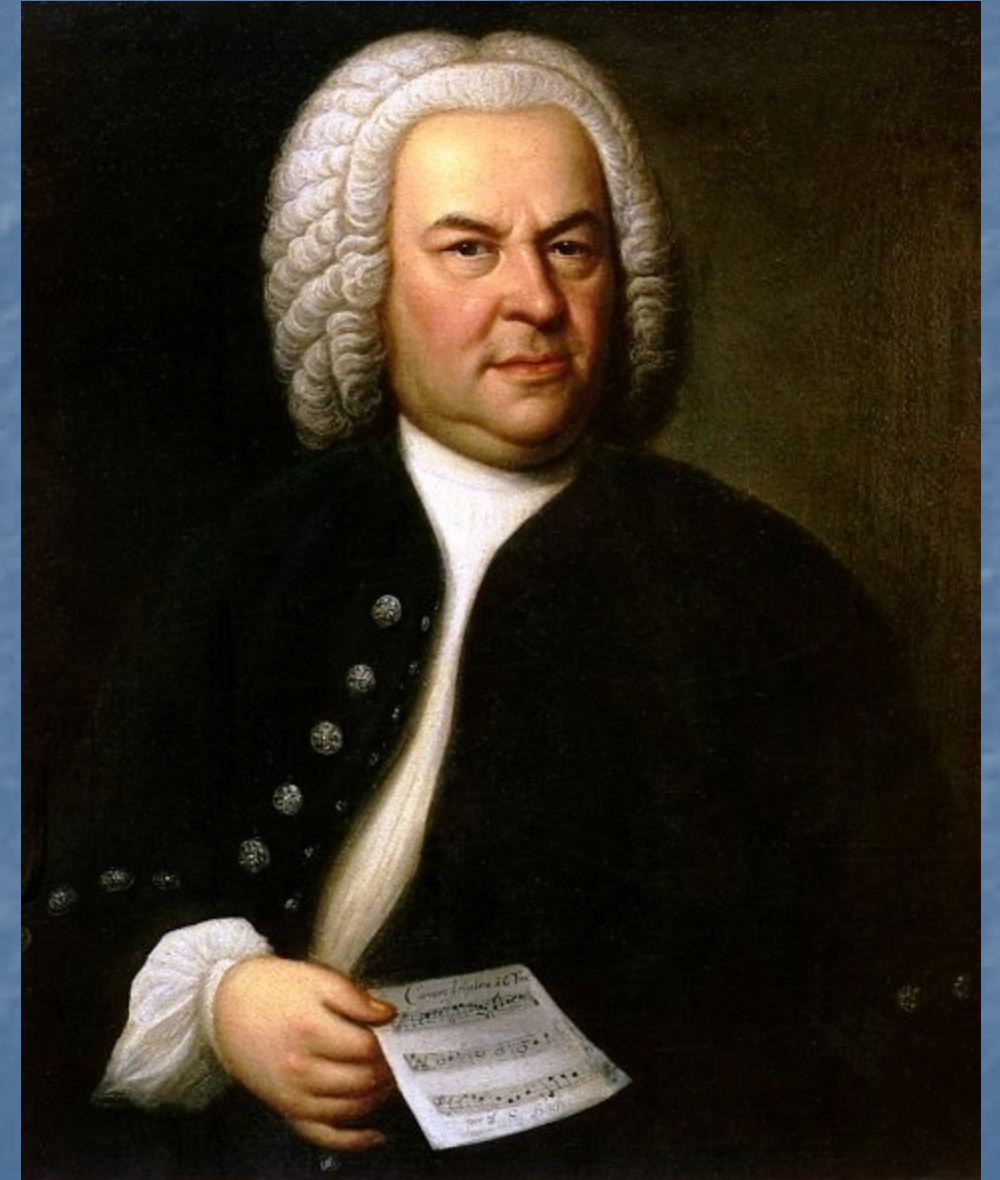
Law and Technology Affecting  
the Music Biz at the Turn of  
the 19<sup>th</sup>-to-20<sup>th</sup> Centuries

Mark Schubin



# Johann Sebastian Bach

- son, grandson, great-grandson, nephew, brother, and father of musicians
- composer of >1000 original works
- organist, music teacher, choir director, music director
- Court Composer



Bach in 1748

by Elias Gottlob Haussmann



# Musician Options

- minstrel, street musician, fair
- church
- ball, party, salon
- theater
- concert, ballet, opera
- café, restaurant



Le Café des Aveugles à Paris  
c. 1800



# Composer Options

- single sale
- commission
- appointment



Nikolai Rimsky-Korsakov  
by Valentin Serov



# Handel: 42 Operas

## Revenue streams:

- commission
- conducting,  
playing, directing,  
managing
- libretti
- candlesticks
- candles



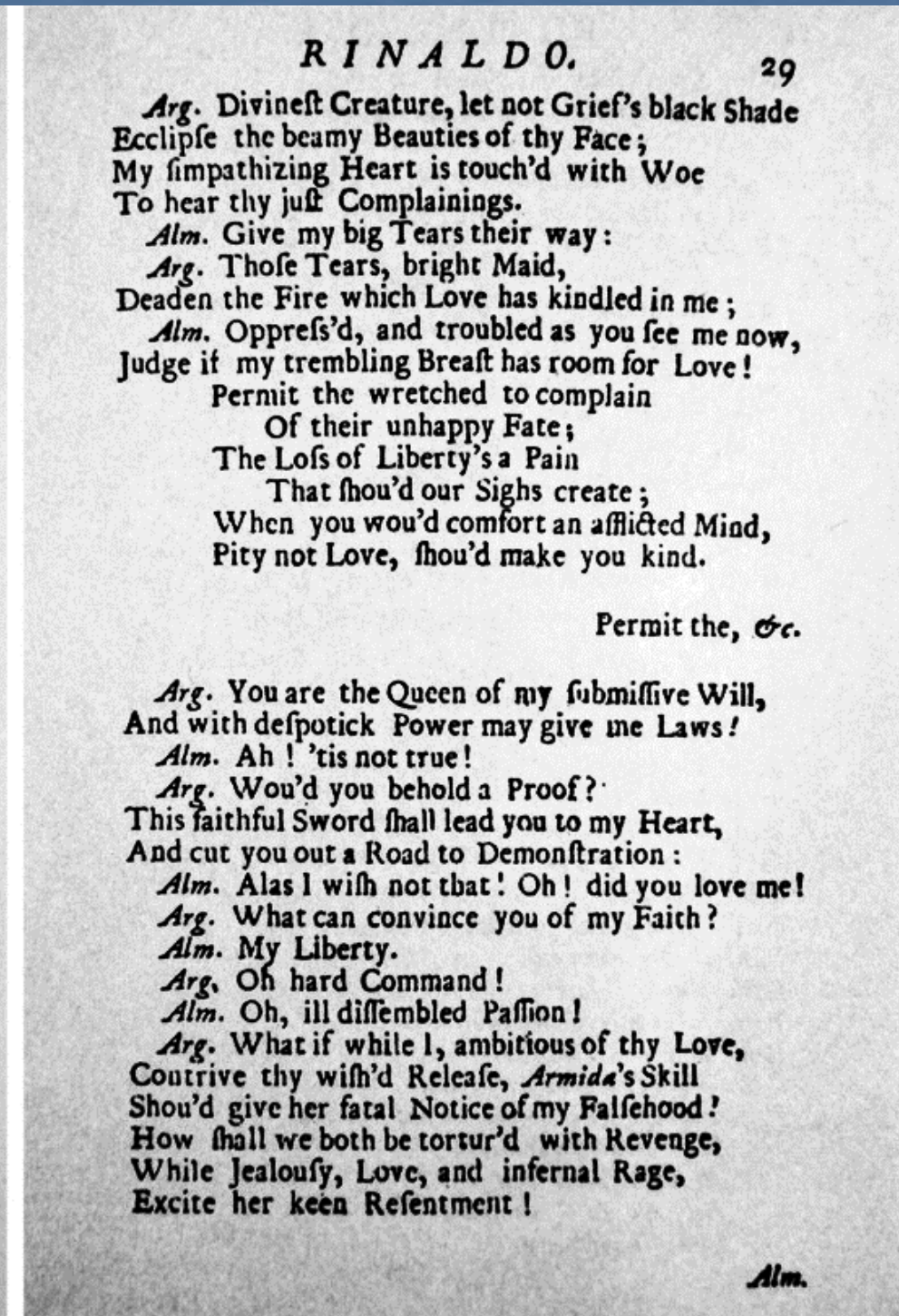
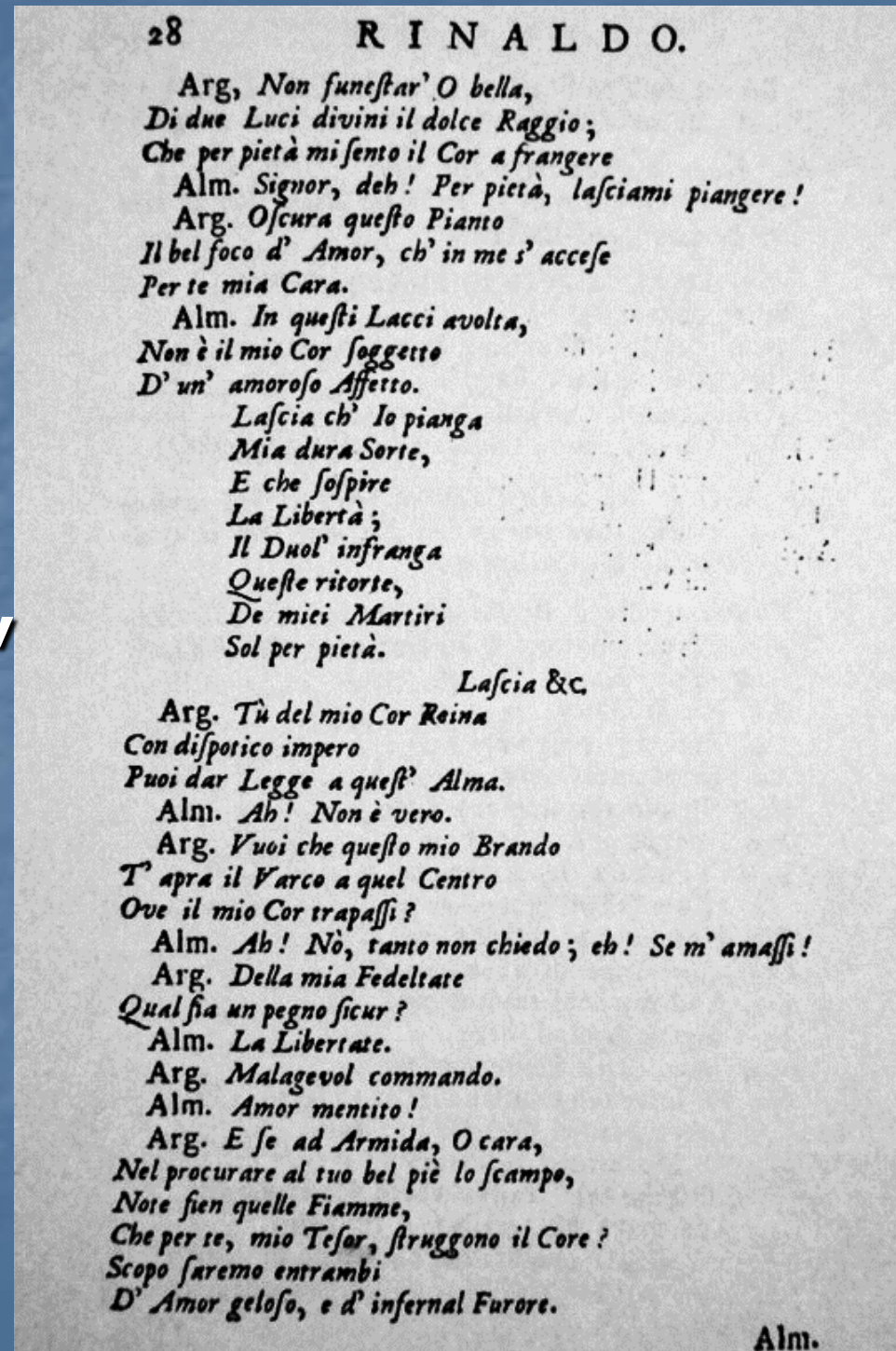
George Frideric Handel  
by Balthasar Denner



# Handel: 42 Operas

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Giuseppe Verdi  
by Giovanni Bol

# Copyright

- Early composers earned by commission
  - Verdi eventually earned by copyright
    - 1840s: 14 operas
    - 1850s: 7 operas
    - 1860s: 2 operas
    - 1870s-90s: 1 opera per decade
- (numbers can vary based on reworking)



Mr. Monopoly  
by Hasbro



# Copyright Effects

- ongoing revenue
- more compositions
- better compositions

## COPYRIGHT AND CREATIVITY- EVIDENCE FROM ITALIAN OPERAS\*

MICHELA GIORCELLI, UCLA, AND  
PETRA MOSER, NYU, CEPR, AND NBER

SEPTEMBER 22, 2016

$$opera_{it} = \beta \sum_{r=1781}^{1820} \beta_r Lombardy \& Venetia_i \times year_r + \varphi_i + \delta_t + \varepsilon_{it}$$



# Technology: Playback for the Rich

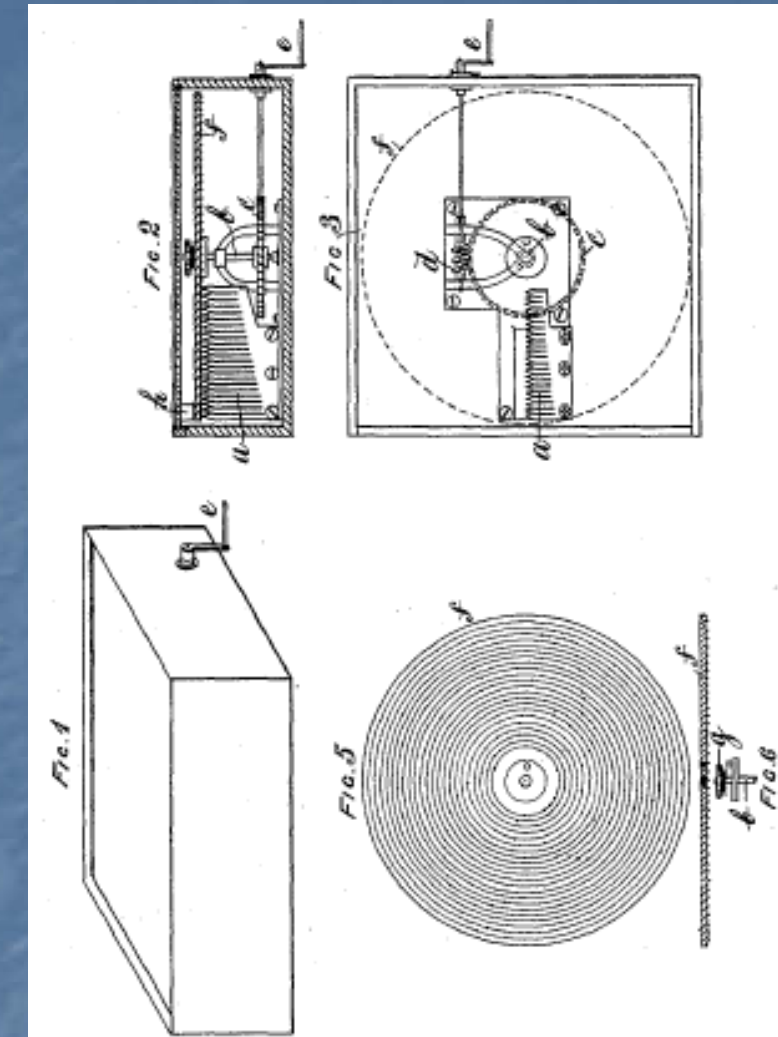
- 1784 David Roentgen & Peter Kinzing automaton for Marie-Antionette plays opera music
- 1738 Charles Clay clock with organ played pieces from operas
- 1625 Samuel Bidermann clock with organ & spinnet
- c. 1480 barrel re-pinnable
  - pre-Jacquard loom





# Pre-Phono Playback for the Masses

- 1888 gramophone disk
- 1885 musical box disk
  - mass produced
    - “a few pence”
  - disk changers (longer)
  - coin-operated
- 1881 “mechanical rights”
  - Paris merry-go-round organ
- 1845 *New-York Mirror*: tunes from that year’s new opera *The Bohemian Girl* were already “established favorites... ground by every hand organ”



disk musical box patent  
Ellis Parr 1885

1892  
organ  
grinder



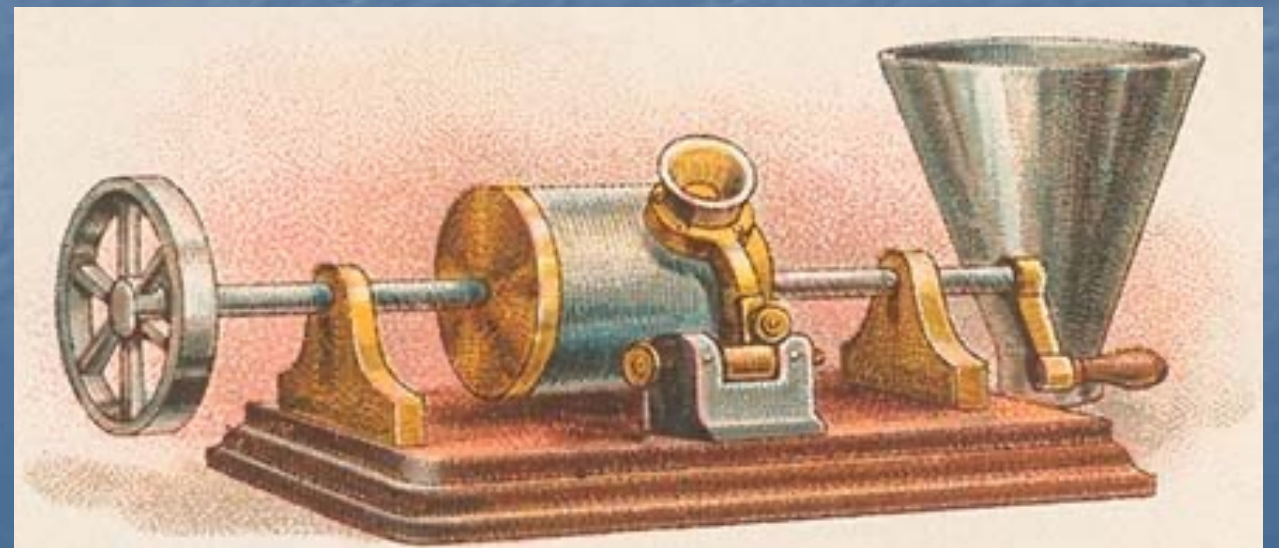
# 1<sup>st</sup> Bootleg Recording: 1888

Interesting and highly colored accounts of queer incidents seem to be "the rage" just now around the theatres which employ special men to do their press work. The latest comes from the Casino. The story is to the effect that on Wednesday evening the manager of a small travelling opera company went to see "The Yeomen of the Guard," and took with him a phonograph. He had succeeded in recording the entire first act with his machine, when the eagle eye of an usher lighted upon him and he was hustled, phonograph and all, into Mr. Aronson's office. The manager explained that he wanted to produce the operetta on the road, and had been compelled to steal the score, as he could not get it otherwise. The libretto he had bought for twenty-five cents. Mr. Aronson was generous and forgave the manager, but took the imprinted foil of the phonograph away from him.

*New York Tribune 1888 November 2 p. 7*

As he turned from the windows his eye lighted upon a queer-looking machine lying on a chair near the lone man. Daly's first thought was of dynamite and anarchy; his next of how to remove the disciple of Herr Most and his death dealing machine; his next thought—but before he thought again he had planted the man and his machine in a chair in Mr. Rudolph Aronson's office, and was standing at a respectful distance from him waiting for either the machine to explode or the man to begin a barangue.

*Electrical Review 1888 November 10 p. 7*





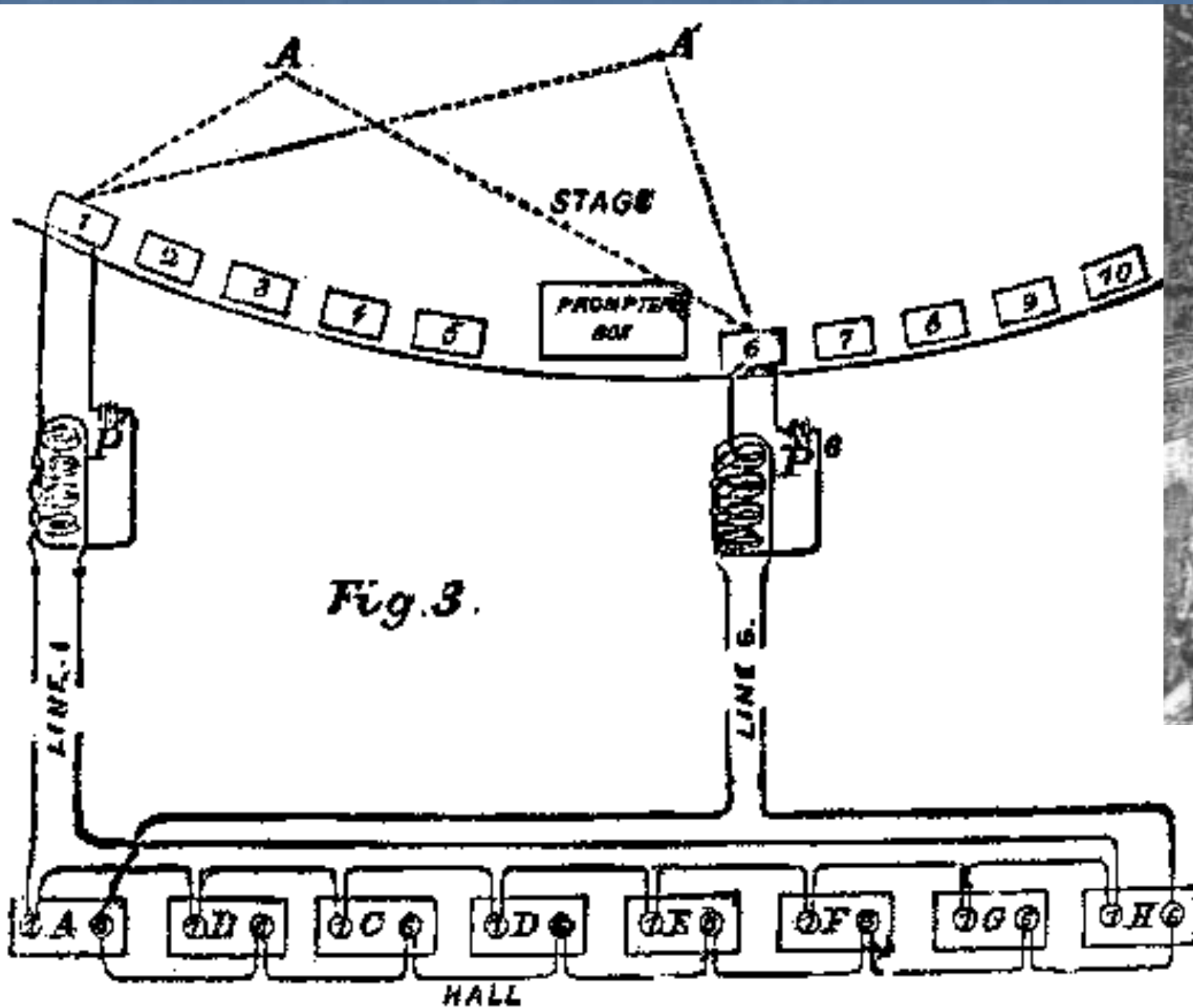
# The First Live Home Listeners: 1880

- Edward P. Fry, connected to New York's Academy of Music no later than November
  - courtesy of Col. J. H. Mapleson
  - arranged photos of singers around himself
- William Hearnden, connected to Plymouth's Theatre Royal possibly in November
  - courtesy of J. R. Newcombe





# Paris Stereo 1881 (London later same year)



Victor Hugo: "It's very strange. We heard the opera through two ear-pieces connected to the wall." "The children were delighted, & me, too."



# Commercial Live Services

- Homes:

- pay-per-event
- subscription
- subscribers:

- Marcel Proust, Charles Gounod, French President

- Institutions:

- coin-op



A M.KIR. **OPERA,**  
A NÉPSZINHÁZ-VIGOPERA  
felváltva hallható  
**A TELEFON-HIRMONDÓ**  
összes állomásain.  
Megrendelhető Rákóczi út 22.sz.a.  
A BEVEZETÉS DIJTALAN = ELŐFIZETÉS EGY ÉVRE 36 KOR.





# Before Headphones



elbow rest



# Broadcast Rights Established Before Radio

- Brussels 1899
  - théâtrophone demo at electricity exhibition uses *Rigoletto* from Société des Concerts (performance fee paid)
  - Verdi sues and wins
- Basis for ASCAP

JUSTICE DE PAIX DE BRUXELLES

(1<sup>er</sup> CANTON)

**2 octobre 1899**

DROIT D'AUTEUR. — ŒUVRE MUSICALE.  
— AUDITION TÉLÉPHONIQUE. — GRAPHOPHONE. — PHONOGRAPHE. — ATTEINTE AU DROIT.

*Constitue une atteinte au droit de l'auteur d'une œuvre musicale, l'établissement, sans son consentement, d'un local où, moyennant rétribution, le public participe par voie téléphonique ou par le graphophone ou phonographe à l'audition de cette œuvre, d'après l'exécution qui en est donnée, avec le consentement de l'auteur, par une autre personne, dans un autre local et devant un autre public (1). (1<sup>re</sup> espèce.)*

*Il en est ainsi, même si le but de celui qui organise ces auditions téléphoniques ou par graphophone ou phonographe, est uniquement de faire connaître ces inventions, et non de retirer un bénéfice de l'usurpation du droit de l'auteur de l'œuvre (2). (2<sup>e</sup> espèce.)*

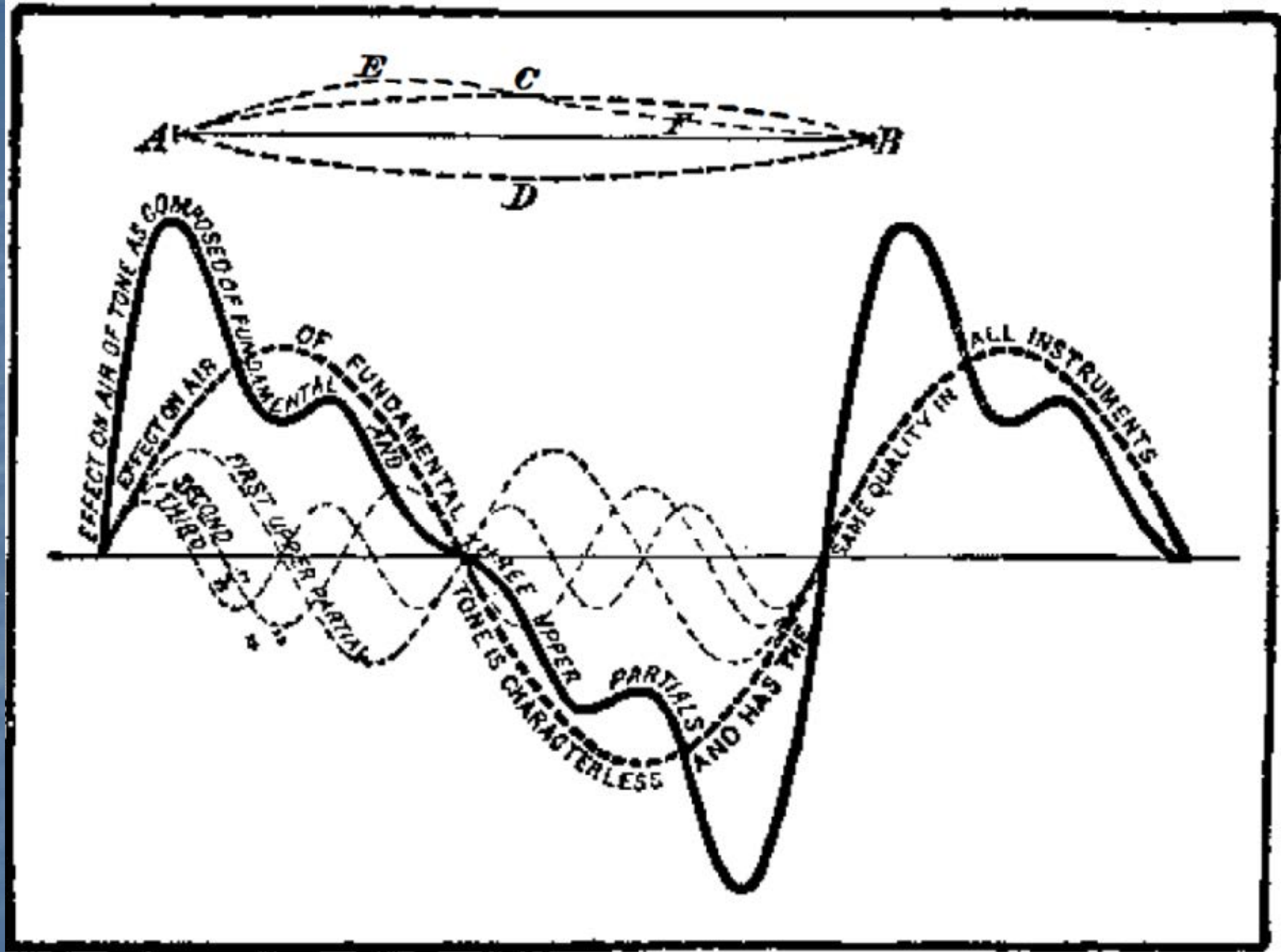
*Première espèce.*

(VERDI, — C. SOCIÉTÉ DE TÉLÉPHONIE PRIVÉE.)



# Synthesizing Sounds

“The Telharmonium—an Apparatus  
for the Electrical Generation  
and Transmission of Music,”  
*Scientific American*,  
March 9, 1907, p. 210

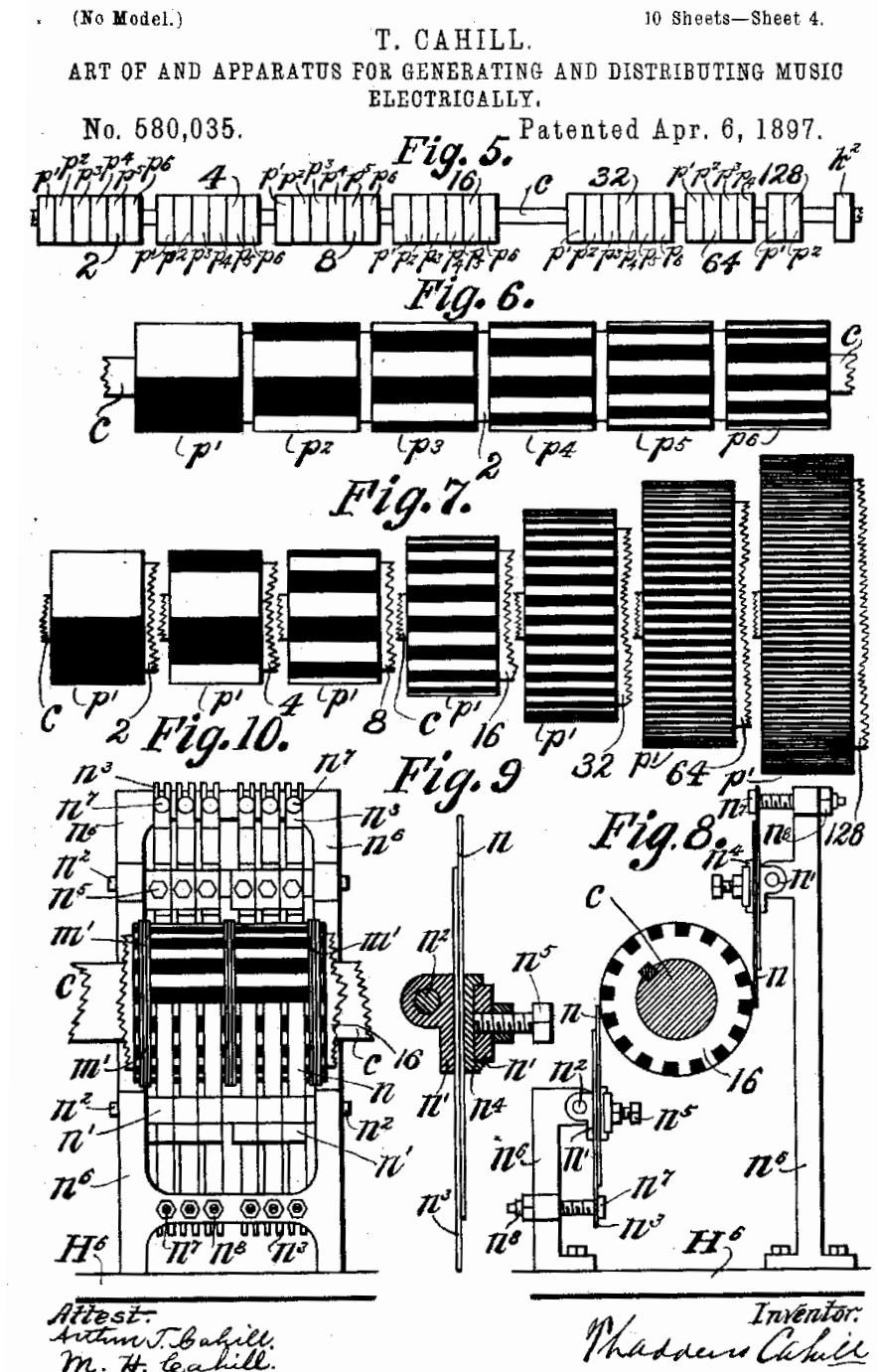


**Diagram Showing Effect of the Upper Partial in Modifying the Fundamental Tone.**



# The Telharmonium

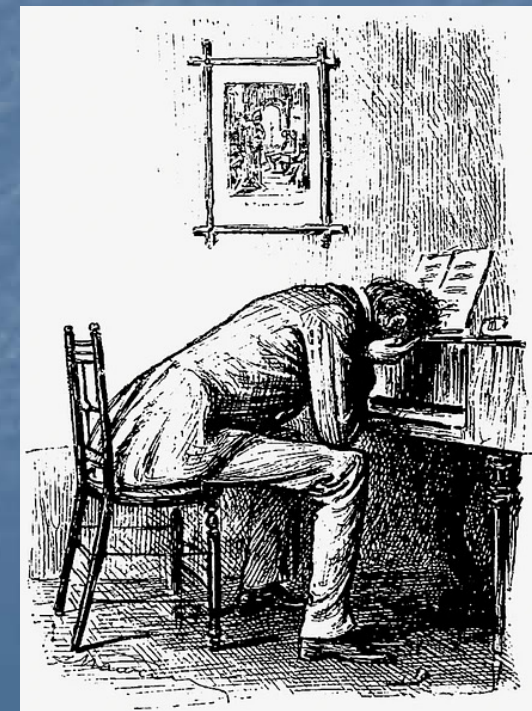
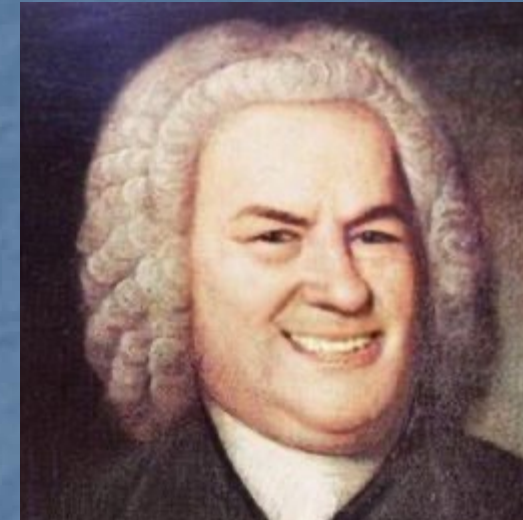
- Business plan: music to restaurants
  - forerunner of Muzak
- Technology: alternator per sine wave
  - 200 tons in 2<sup>nd</sup> version
  - 30 railroad freight cars
  - sums of harmonics
    - much power
    - music induced into other lines





# Legacy

- Composers earn from copyright, broadcast rights, mechanical rights
- Musicians compete with recordings, radio, streaming





a pdf of these slides is available at  
[bit.ly/hpa24-prt](https://bit.ly/hpa24-prt)

