

# The 1880s Speak: Recent Developments in Archeophony



Patrick Feaster • ARSC • 19 May 2012



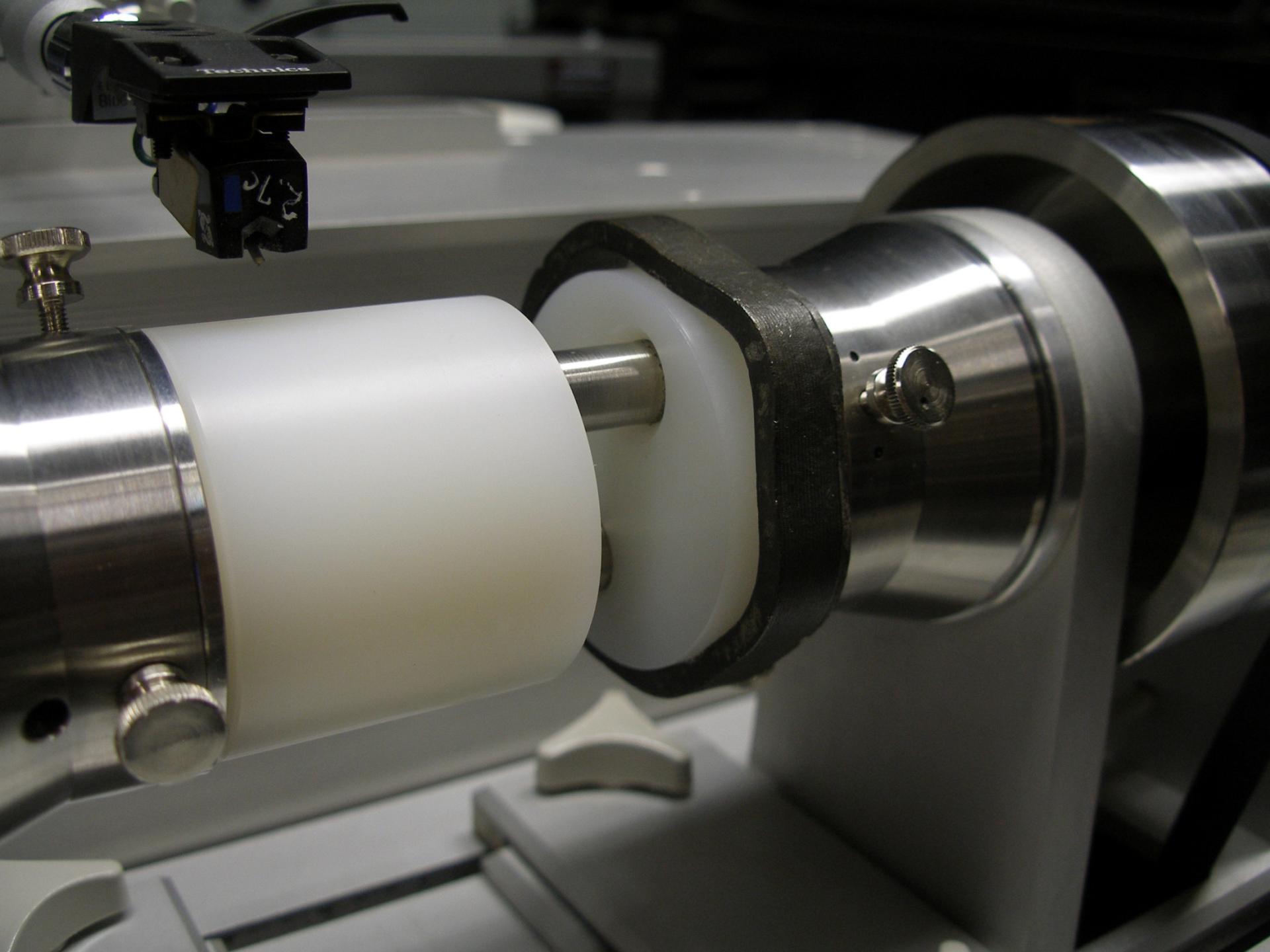
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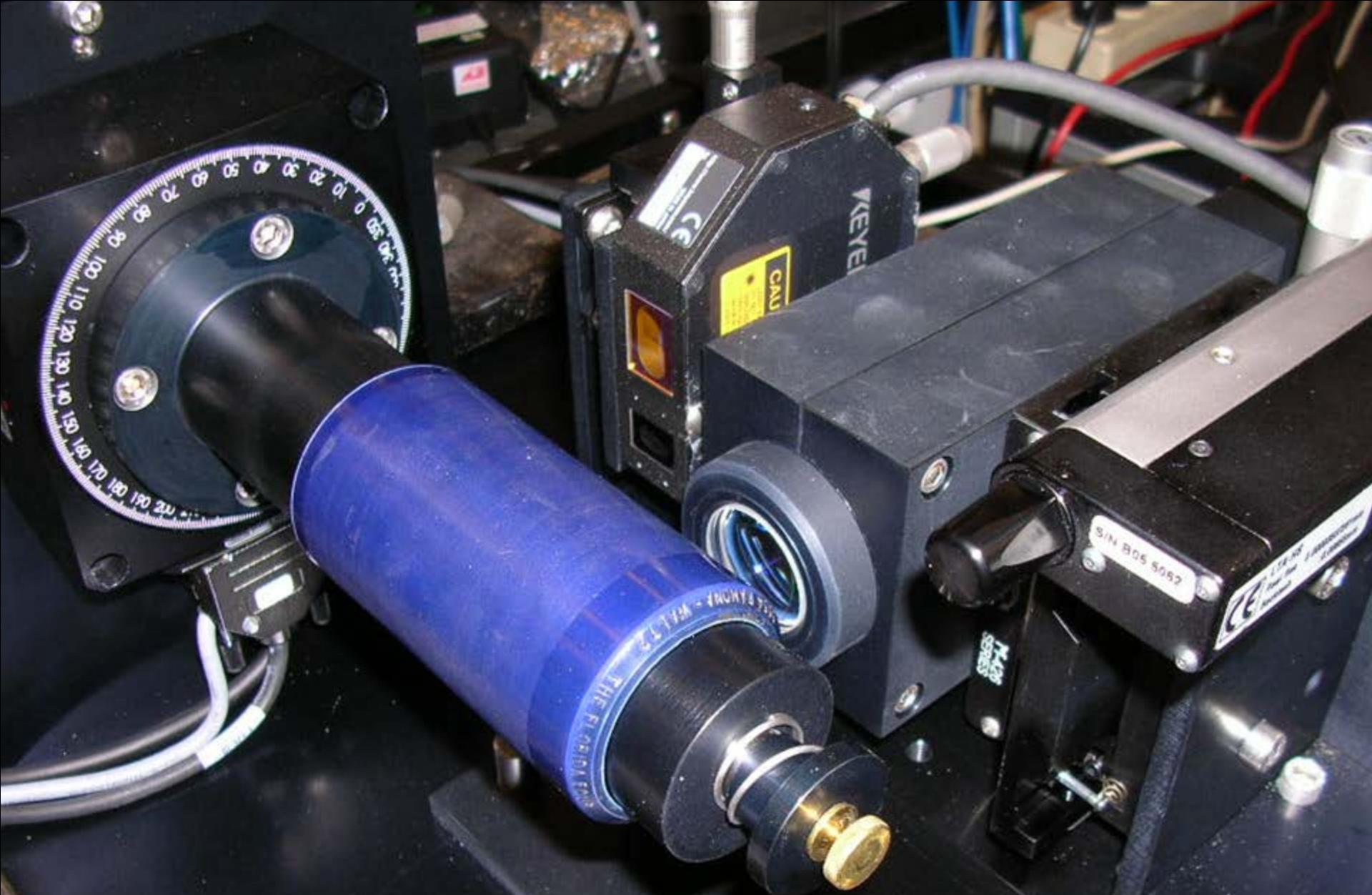




“Tin Phonograph Cylinder  
[...] Record”







# 3D Imaging: Confocal Scanning Probe

Lawrence Berkeley National Laboratory



“Tin Phonograph Cylinder  
[...] Record”







## Thomas Edison

National Historical Park  
New Jersey

A A A

### Explore This Park

[Park Home](#)[Plan Your Visit](#)

#### Photos & Multimedia

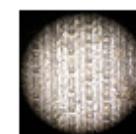
[Photo Gallery](#)[Twitter](#)

#### Listen to Sound Recordings

Theo Wangemann's  
1889-90 European  
Recordings

## Early Talking Doll Recording Discovered

On May 11, 2011, scientists at the Lawrence Berkeley National Laboratory in Berkeley, California recovered sound from an artifact that historians believe is the earliest surviving talking doll record. The artifact is a ring-shaped cylinder phonograph record made of solid metal, preserved by the National Park Service at Thomas Edison National Historical Park. Phonograph inventor Thomas Edison made the record during the fall or winter of 1888 in West Orange, New Jersey. On the recording, an unidentified woman recites one verse of the nursery rhyme "Twinkle, twinkle, little star". The voice captured on the

[Hear the recording](#)[Read More »»](#)

June 25, 88

Theo. Hoch, Esq.,  
225 East 5th Street,  
New York City.

Dear Sir:-

I take pleasure in enclosing herewith Mr. Edison's check for \$15, to cover the expenses of yourself and Friends in connection with your recent visit to the Laboratory.  
Mr. Edison desires me to thank you for the assistance which you rendered and he hopes at some future time to have the pleasure of seeing you at the Laboratory to make some tests in connection with the new phonograph, which is a great improvement over the one you tried.

Yours truly,

A.D.T.

Private Secretary.



## Theodore Hoch

25 June 1888  
TAED D8818ANT; TAEM 122:394

# Scientists Play World's Oldest Commercial Record

by Ron Cowen on 6 July 2011, 2:20 PM | [12 Comments](#)

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This scratchy, 12-second [audio clip](#) of a woman reciting the first verse of "Twinkle, Twinkle, Little Star" doesn't sound like much. But the faint, 123-year-old recording—etched into a warped metal cylinder and brought back to life after decades of silence by a three-dimensional (3D) optical scanning technique—appears to belong to the first record intended for sale to the public. Made for a talking doll briefly sold by phonograph inventor Thomas Edison, the early record is the oldest known American recording of a woman's voice and may be the oldest known record produced at Edison's laboratory in West Orange, New Jersey.

[ENLARGE IMAGE](#)



Early recording. Edison's talking doll, briefly produced in 1890, used a hand-cranked wax cylinder to speak.



# Alexander Graham Bell recordings played from 1880s

**AP** Associated Press By BRETT ZONGKER | AP – Wed, Dec 14, 2011

News

RE

## Playback: 130-Year-Old Sounds Revealed

Smithsonian, Library of Congress and Lawrence Berkeley National Laboratory Partnership Unlocks Mysteries of History, Science and Invention: Presenting a First Listen to the Experimental Sound Recordings of Alexander Graham Bell

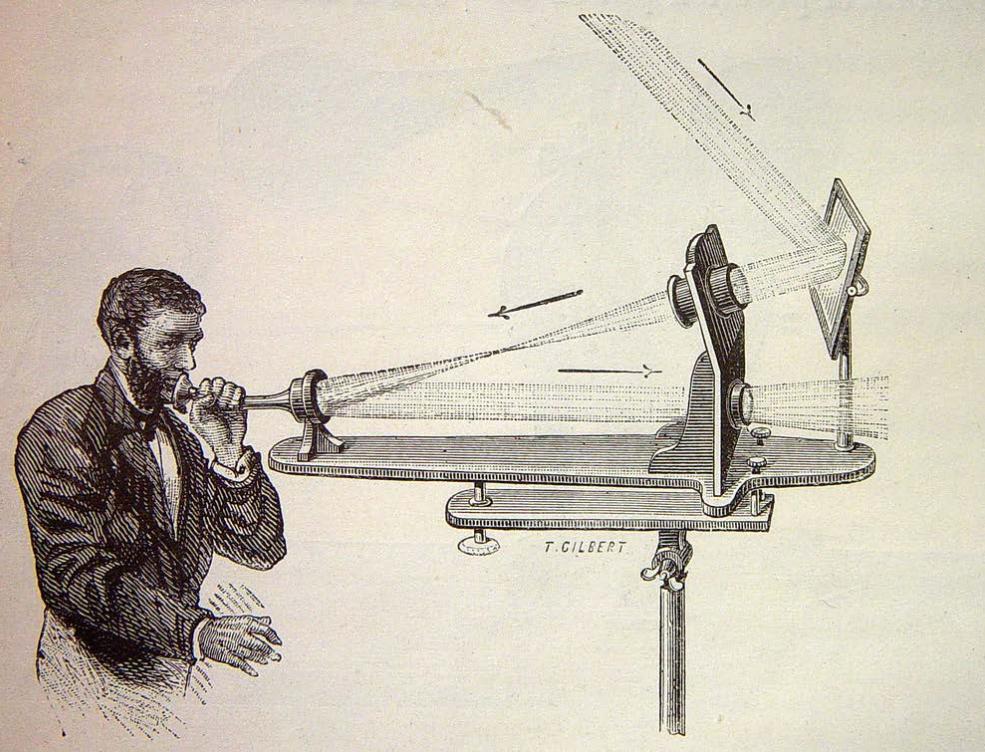
December 14, 2011



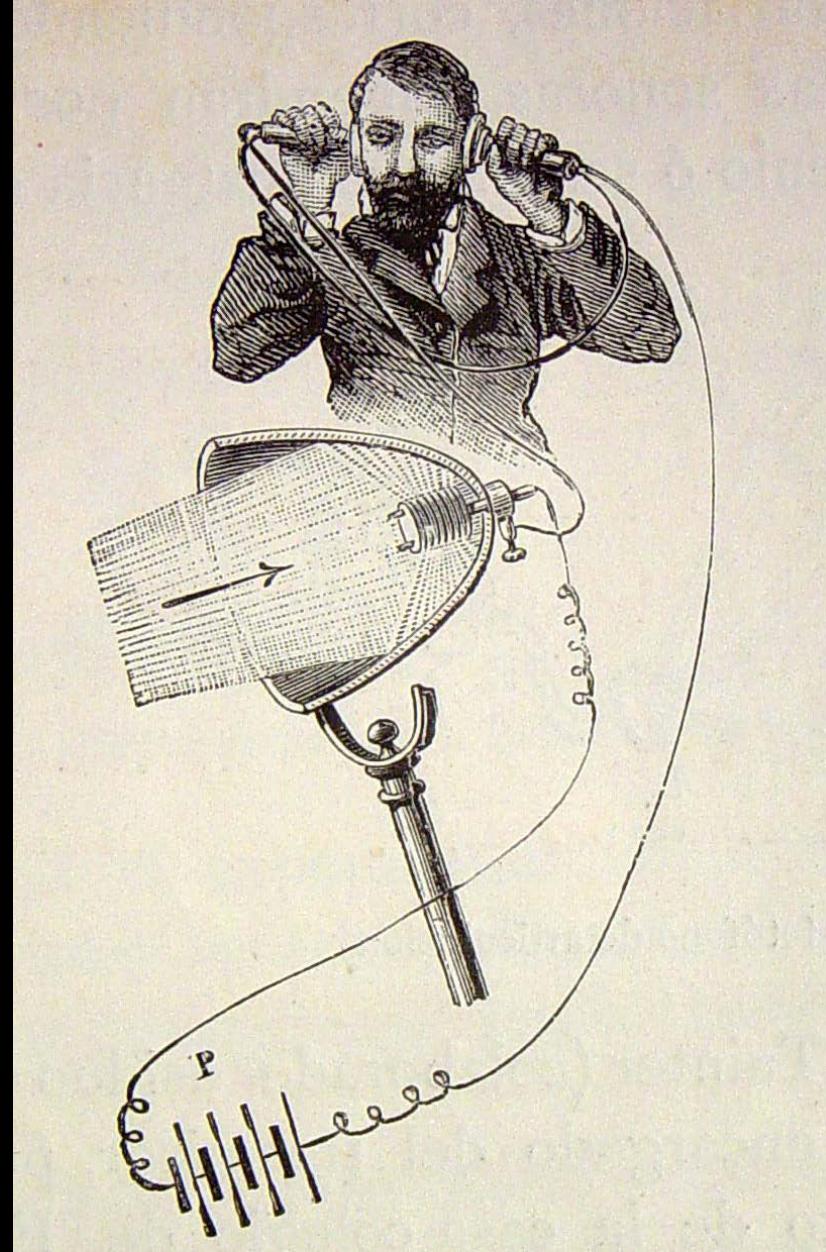
Alexander Graham Bell  
Charles Sumner Tainter  
Chichester Bell







photophone



## Bell's Record

## Tainter's Record

Trilled R.

"The Photophone is complete.  
Perfect articulation and  
good loud articulation."

Trilled R.

"Mr. Tainter we must try this  
between the Smithsonian  
Exhibition and the  
Franklin School House."

"Hah! Hah! Do you understand  
what I say?"

Trilled R.

"The Photophone is perfect —  
good loud articulation."

Trilled R.

"Mr. Tainter we must try this  
from the Smithsonian to the  
Franklin School House."

Hah! Hah! Mr. Tainter do you  
understand what I say.

Noted by A.G.L June 2<sup>d</sup> 1880  
S. T. June 2<sup>nd</sup> 1880.

# 2 June 1880

## Bell's Record

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Noted by A.G.L June 2<sup>d</sup> 1880  
S. T. June 2<sup>nd</sup> 1880.

## Tainter's Record

## Bell's Record

Trilled R.

Coughing

"I have got a very bad  
cough do you hear what  
I say"

Trilled R.

Coughing heard  
Recognized as coughing but  
had an unnatural effect. Sound  
more like the exclamation "Hah!"  
than anything else.

I have a very bad cold.  
Do you hear me cough. I have  
a very bad cold. (coughing  
heard).

Trilled R.

Trilled R.

"I think it wholly unnecessary  
to put this in the Smithsonian  
as there will be nothing  
gained by it."

(Voice heard faint - could not  
understand. A few words sounded  
something like "I did it on purpose"  
then unintelligible & came up  
faint voice again.)

(Found that light had shifted  
almost off the diaphragm, left  
room to re-adjust mirror (A few)  
upon return gave —

Long silence

Trilled R.

"Hello Hello. I have just been  
up and adjusted the  
mirror and that is the  
reason why I have been so  
long".

Hello - Hello - I have got my —  
on the -- -- -- I have been  
on the beach so long."  
(Done three or four times in different  
keys, but rattling effect accompanied  
articulation — like effect produced  
by ordinary telephone arrangements  
when speaker constricts his breath  
too much. Sighed sort of sound.)

Noted by A.G.L June 2<sup>d</sup> 1880



4 June 1881

W. Peltier  
8 tipe -  
disk ph.  
- orange  
sharp end  
- green.



6 June 1881



The following words and sounds are recorded upon the cylinder of the enclosed Graphophone:

"I-r-a — I-r-r — There are more things in heaven and earth than are dreamed of in our philosophy. — I-r-r — I am a Graphophone, and my mother was a Phonograph."



ca. 18 October 1881

Trrr!

One, two, three, four,  
five, six.

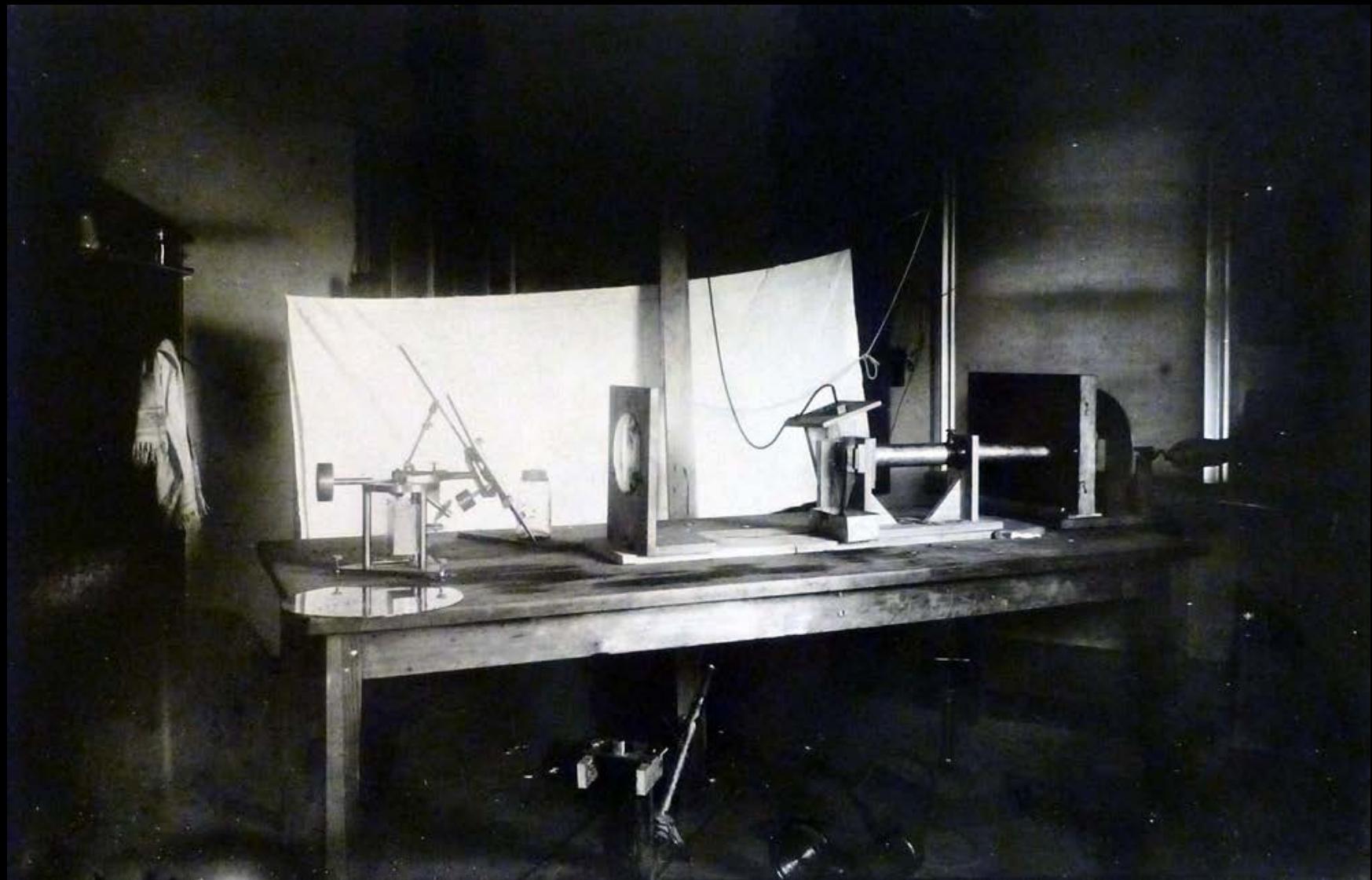
Trrr! Trrr!

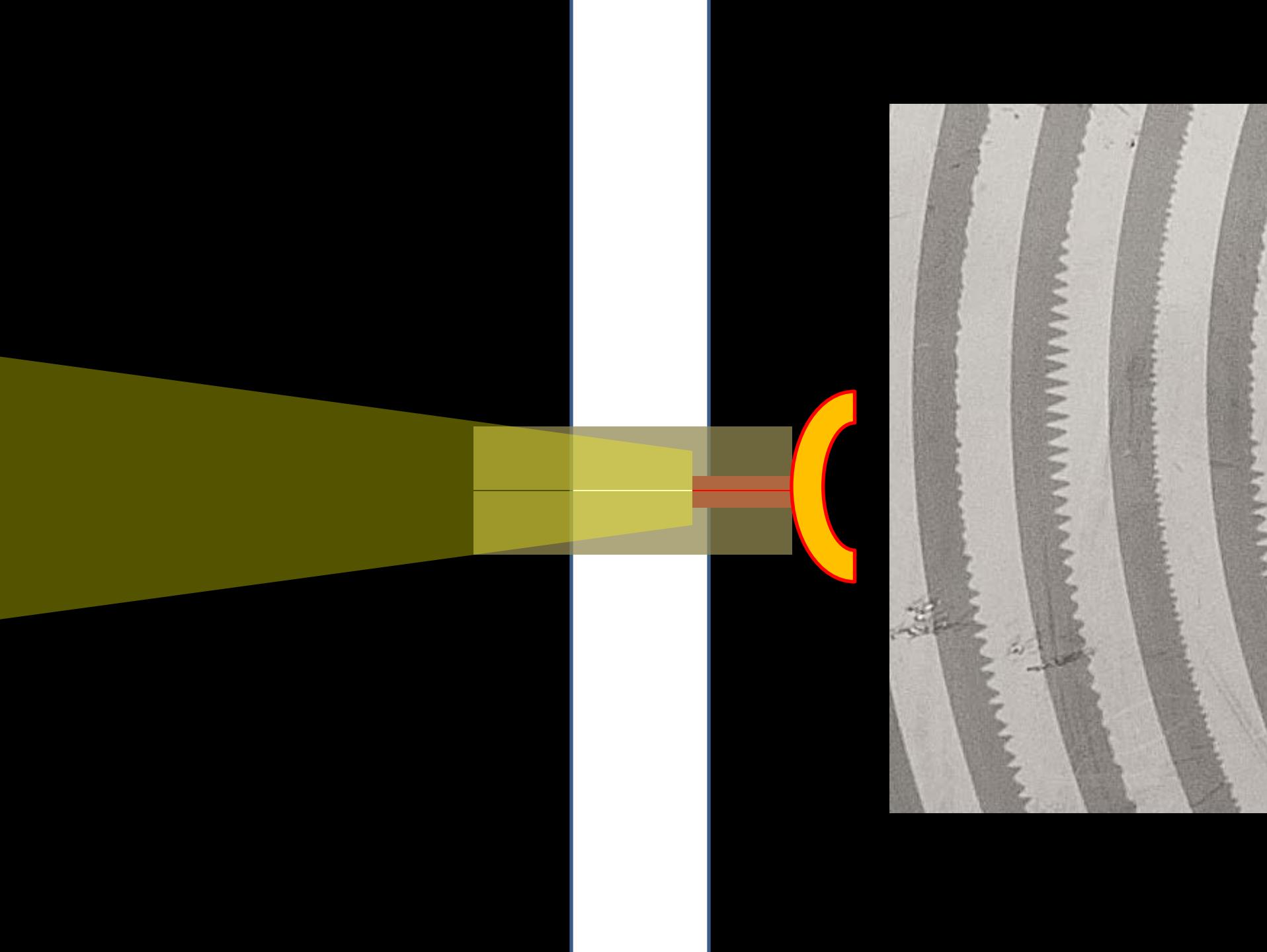




ca. 1884

To be, or not to be—  
that is the question:  
Whether it is nobler in  
the mind to suffer  
The slings and arrows  
of outrageous fortune  
Or to take arms against  
a sea of troubles  
And by opposing end  
them.  
To die, to sleep—



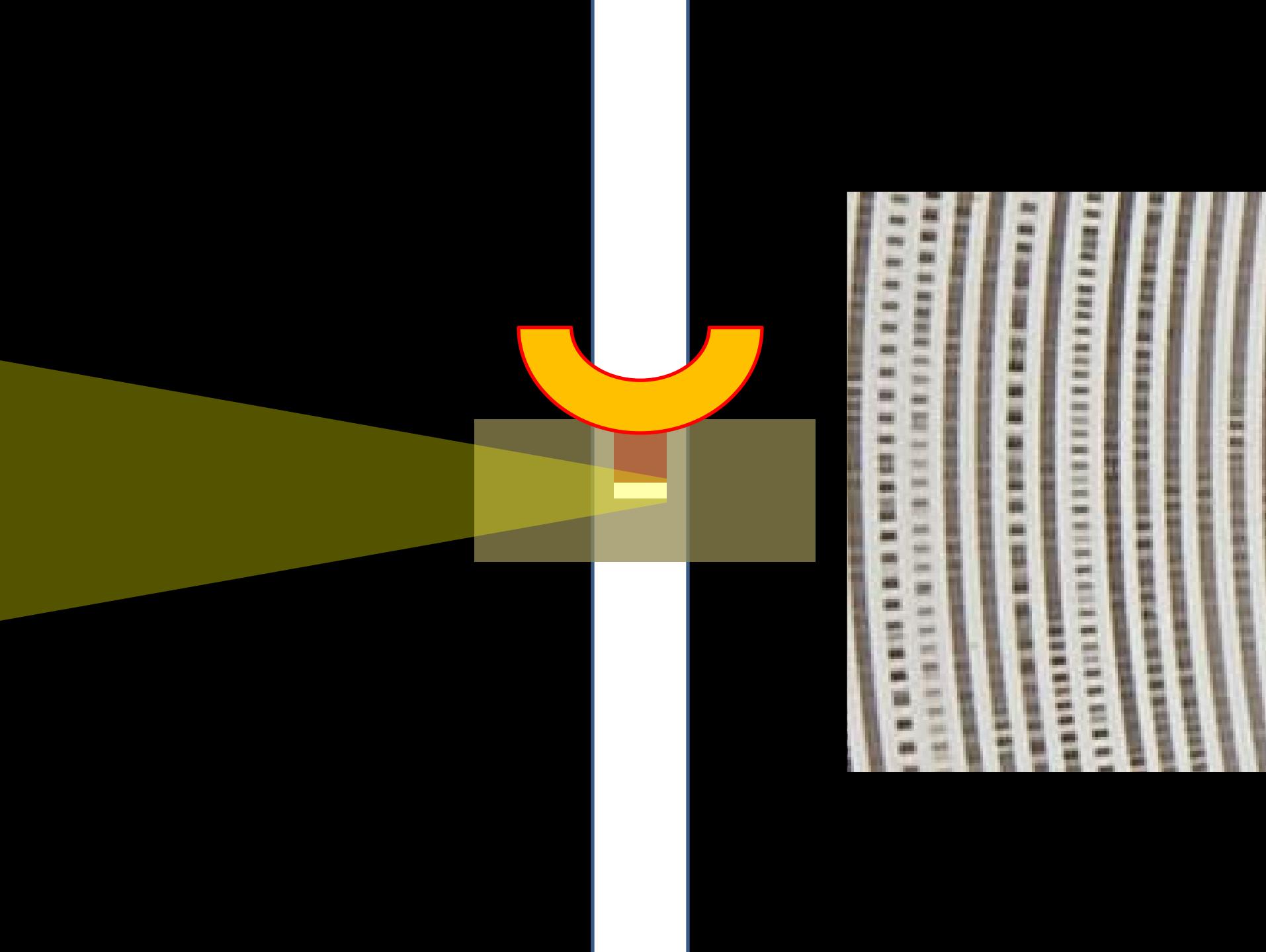


Exp III Nov 17<sup>th</sup> 1884

Style vibrations to word “Barometer”

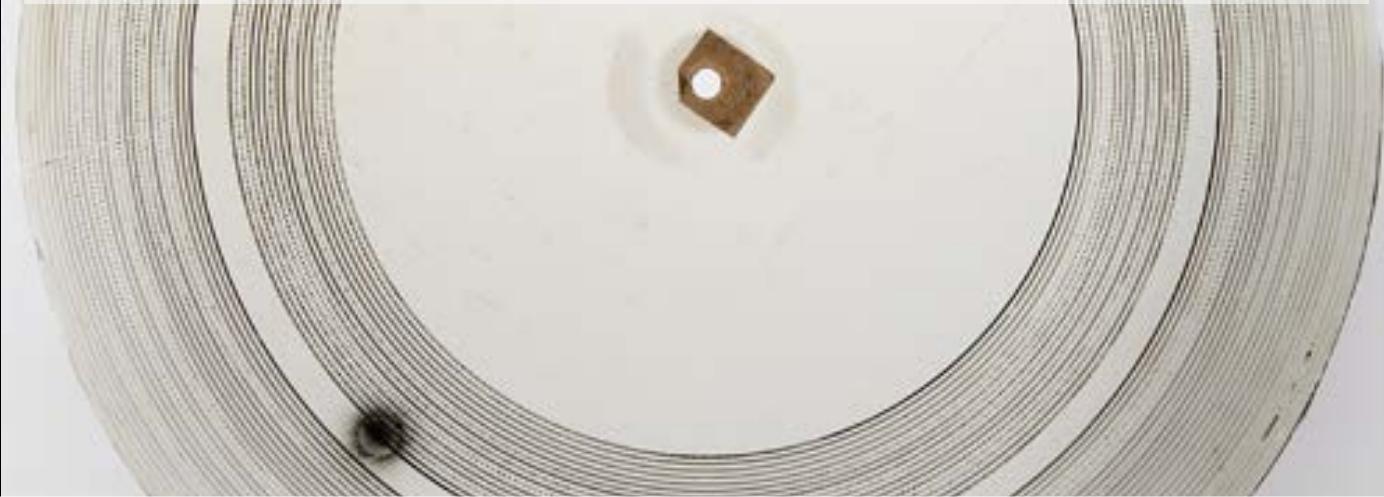
H G Rogers



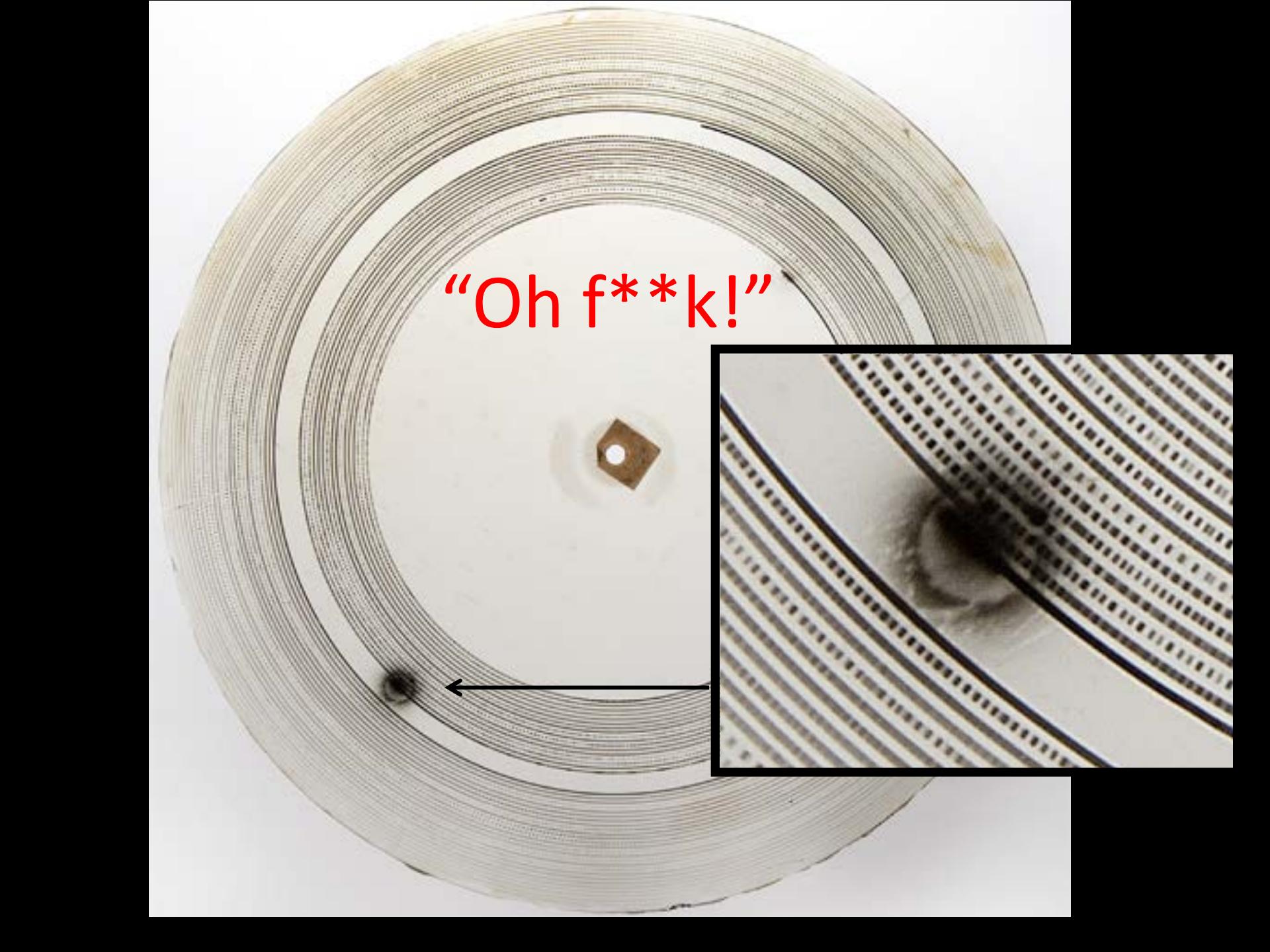


*This record has been inscribed by Mister Sumner Tainter and H. G. Rogers. It's the eleventh day of March, eighteen hundred and eighty five.*

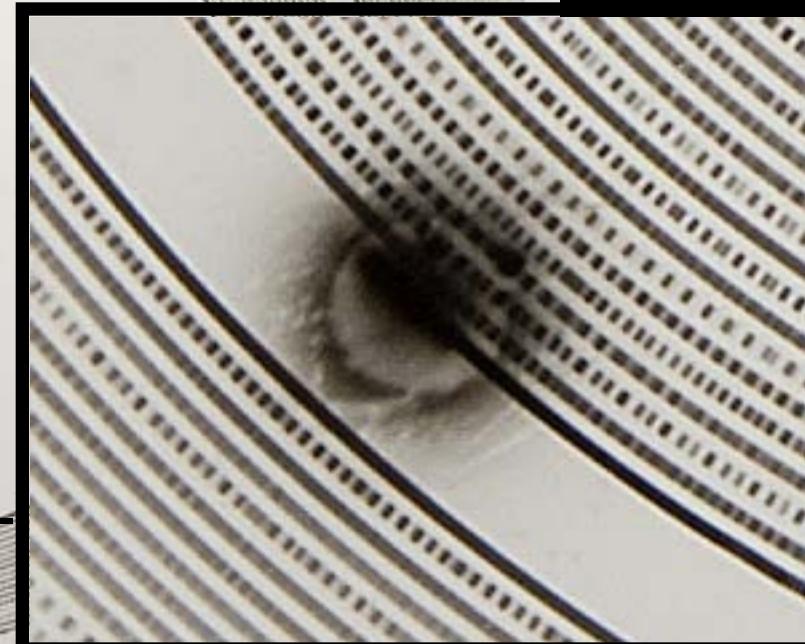
[Trilled R] *How is this for high! Mary had a little lamb, and its fleece was white as snow, and everywhere that Mary went — oh no.*



[Trilled R] *Mary had a little lamb, and its fleece was white as snow, and wherever Mary went, the little lamb was sure to go. How is this for high! [...]*



“Oh f\*\*k!”



THURSDAY, DECEMBER 29, 2011

"Oh, fxxx!" The first recorded naughty word

Volta Labs Recording 3

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0:00 / 0:38

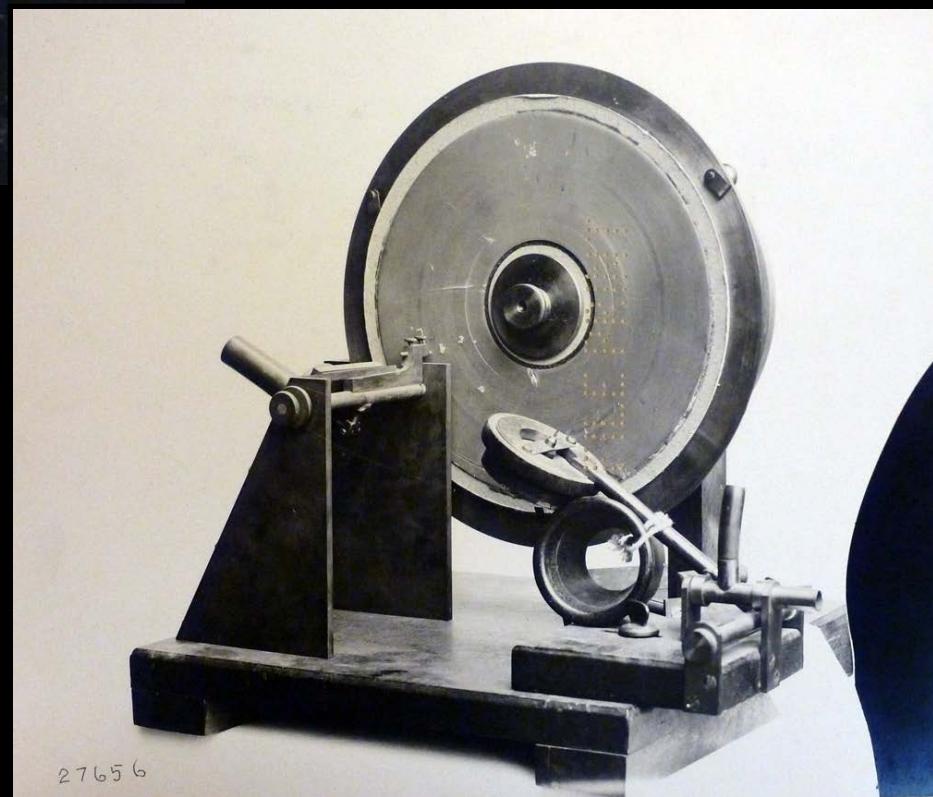
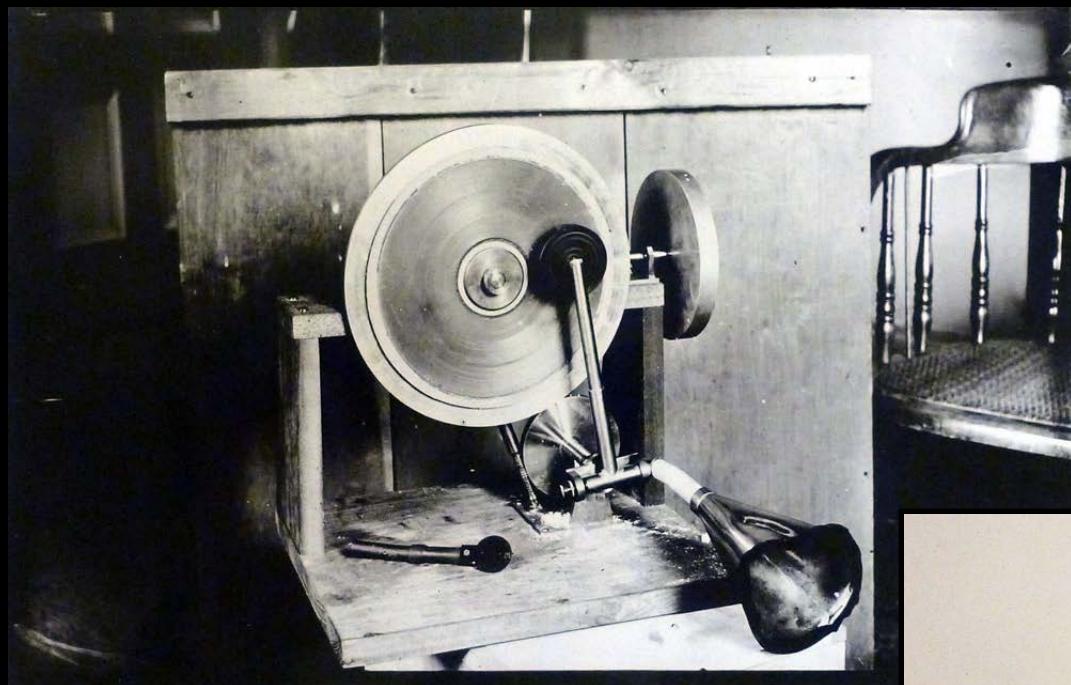


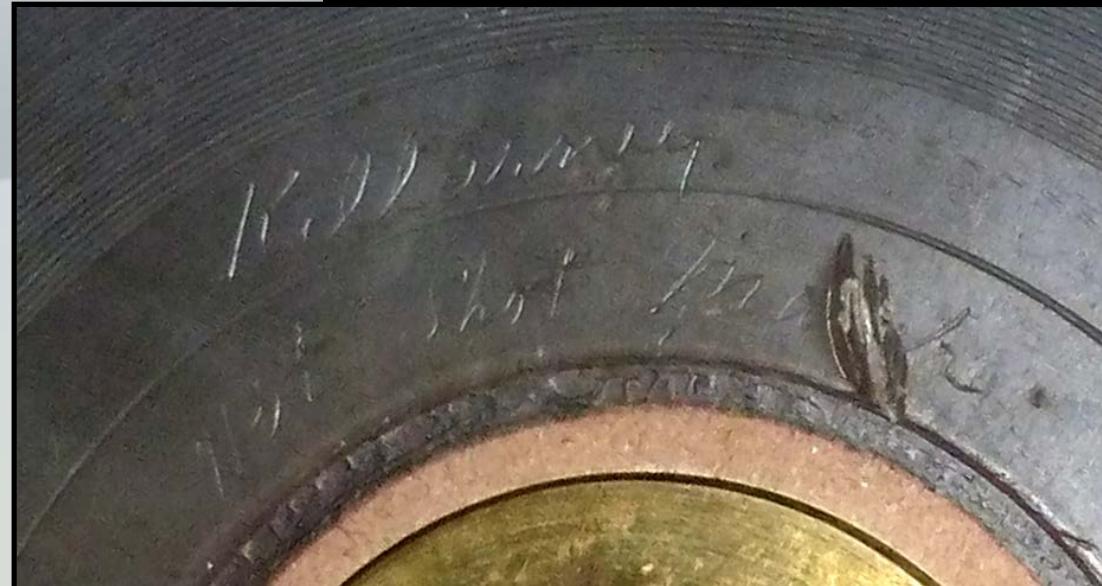
YouTube



Alexander Graham Bell  
reading an excerpt from  
the *Boston Journal*  
on 13 April 1885

NMAH 287909





## “Killarney / Hot Shot March”

ca. 1885  
NMAH 287665





J.C. SCHAARWÄCHTER



Hoffphotograph Se. M. d. Kaisers u. Königs.

BERLIN

Leipziger Str. 130.

To Mr. Thomas A. Edison  
with greatest esteem  
in admiration & friendship  
Yours truly  
Adelbert Wangemann  
May 26<sup>th</sup> 1890.

Adelbert  
Theodor  
Edward  
Wangemann  
(1855-1906)

**EDISON NOW SATISFIED.**

**THE PHONOGRAPH IS PERFECTED.**

His Machine Will Reproduce all Sounds—Soon to be Turned Out Talking Machines at the Rate of 200 a Day—Doing Away With Stenography—Music Faithfully Recorded.

*New Haven Register*, 12 May 1888

## **EDISON'S TALKING MACHINE.**

The Wizard of Llewellyn Park Completes His Phonograph.

## **A MARVELLOUS EXHIBITION.**

Speech and Music Engraved by Sound, Preserved and Articulated Again.

*New York Herald*, 12 May 1888

**A PERFECTED PHONOGRAPH.**

**Edison's Wonderful Speaking Machine No Longer a Toy.**

*Philadelphia Inquirer*, 12 May 1888

**11 May 1888**

## **THE PHONOGRAPH'S MUSIC.**

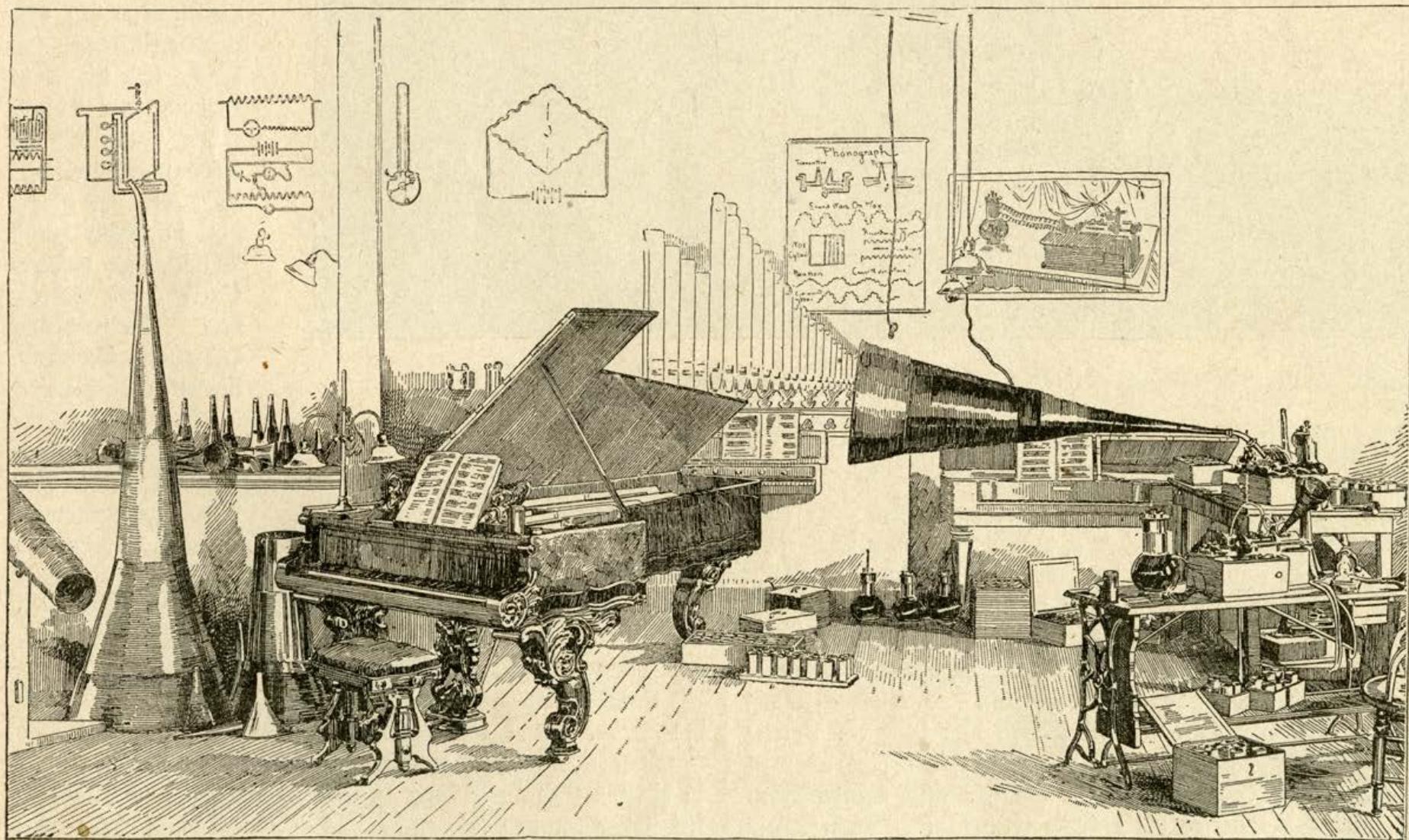
Some Difficulties to be Overcome—Recent Changes and Improvements.

*New York Post*, 12 May 1888

TAED SC88019A; TAEM 146:247

16 June 1888

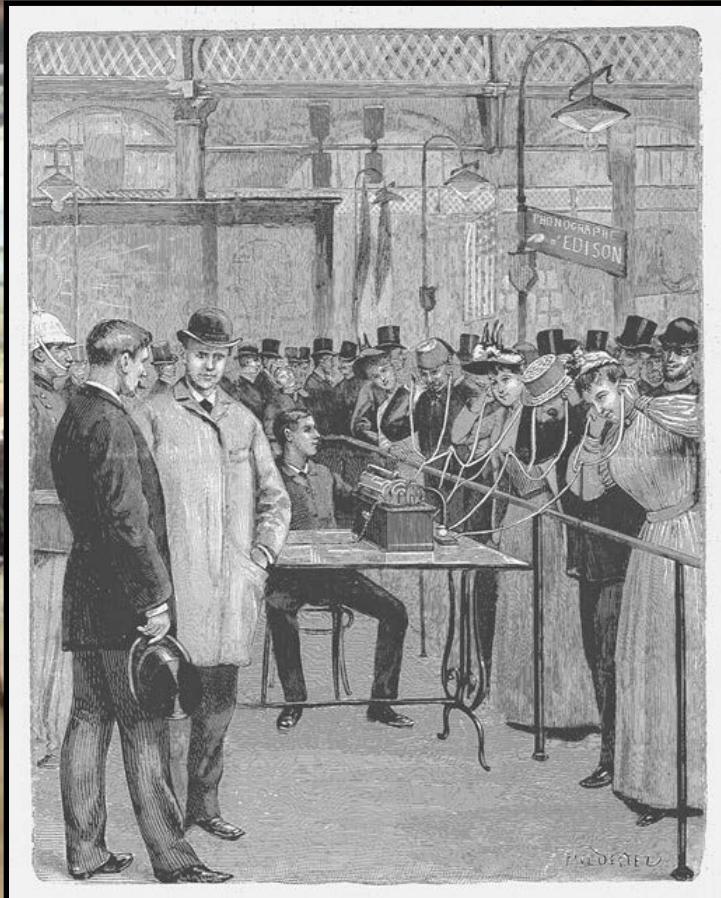




Edisons Laboratorium.



# Paris Universal Exposition 1889



AUDITIONS DU PHONOGRAPE A LA GALERIE DES MACHINES.

7  
8      Song of the  
9      5<sup>th</sup> Regt Promenade  
10     Washington Centennial Parade

---

Mr. Wauquemont left for Paris  
June 15<sup>th</sup> 1889.

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EDIS  
88042

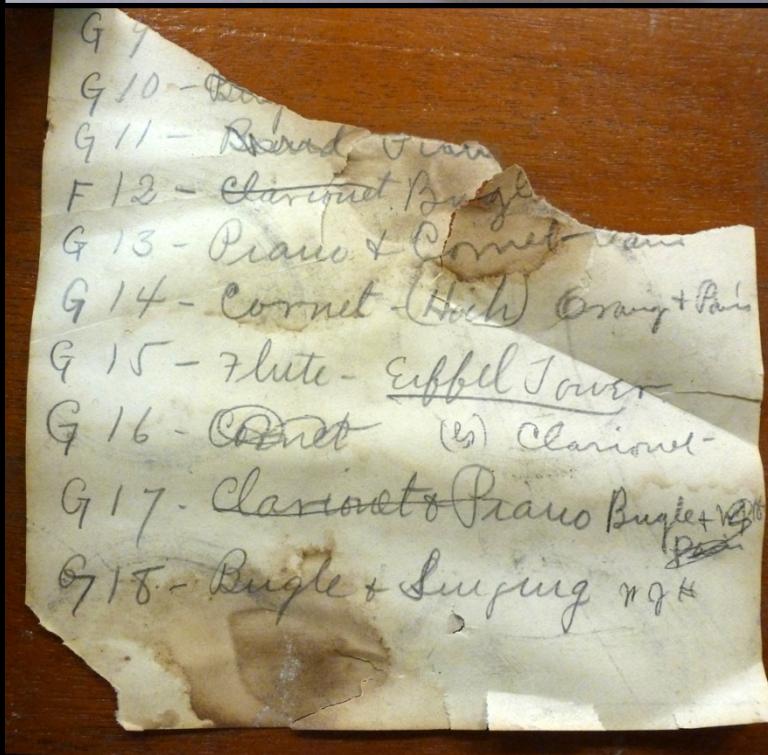
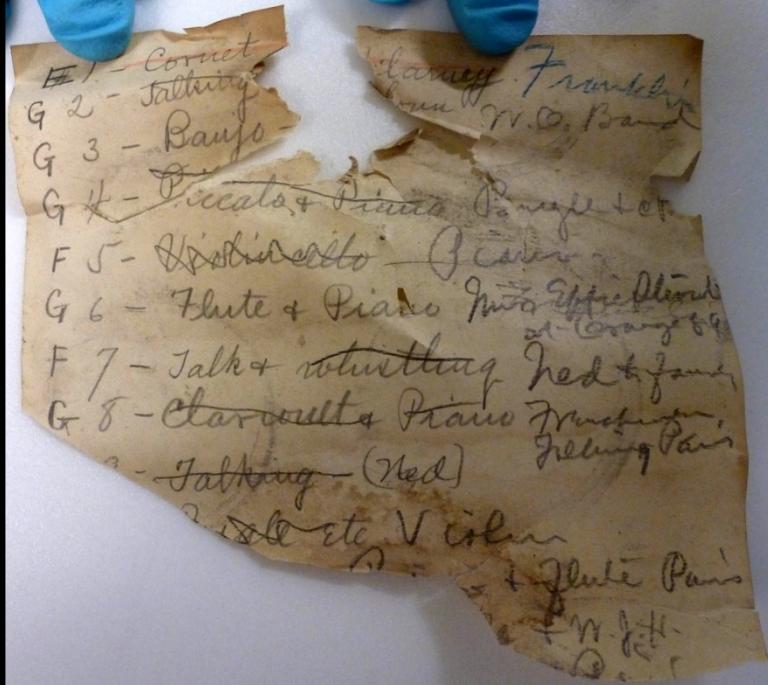
Tacianu Sisters, Paris, 29 August 1889

EDIS 93954





Violin played on the  
Eiffel Tower, Nov. 6, 1889



E1 – **Cornet** [Kil]larney Franklin

G2 – Talking [...] Conn W. O. Band

G3 – Banjo –

G4 – **Piccato & Piano** Bugle & cl.

G5 – **Violin cello** Piano

G6 – Flute & Piano **Franklin**

Miss Effie Stewart at Orange 89

F7 – Talk & **whistling** Ned & family

G8 – **Clarionet & Piano**

Frenchmen Talking Paris

G9 – Talking (Ned)

G10 – **Bugle etc** Violin

G11 – **Band** Piano & Flute Paris

F12 – **Clarionet** Bugle & W. J. H.

G13 – Piano & Cornet Paris

G14 – Cornet (Hoch) Orange & Paris

G15 – Flute – Eiffel Tower

G16 – **Cornet** Clarionet

G17 – **Clarionet & Piano** Bugle & WJH Paris

G18 – Bugle & Singing WJH

Banjo

Miss Effie Stewart at Orange 89





# Paul Taffanel



Flute – Eiffel Tower

Frenchmen Talking  
Paris

## NATURALIZED.

Fee for Passport, - - \$1.00.  
 Fee for filling out application in duplicate, - .50  
 Fee for administering oath in duplicate, - .50

No. 365

ISSUED, September 7<sup>th</sup> 1889

I, *A. K. E. Wengenroth*, a naturalized and loyal citizen of the United States, do hereby apply to the Legation of the United States at *Paris*, for a passport for myself and wife, and my minor children as follows: ..... born at ..... on the ..... day of ..... 18..... and

In support of the above application, I do solemnly swear that I was born at *Baden*, *Germany*, on or about the 13th day of *February*, 1853; that I emigrated to the United States, sailing on board the *Hiroshima*, from *Hamburg*, the 20th day of *August*, 1879, and arriving at *New York*, the 3rd day of *September*, 1879; that I resided five years uninterruptedly in the United States, from 1884 to 1889 at *New York*; that I was naturalized as a citizen of the United States before the *Supreme Court of the City of New York*, on the 11th day of *October*, 1884, as shown by the accompanying certificate of naturalization; that I am the bearer of Passport No. .... issued by ..... on the ..... day of ..... 18....., which is returned herewith; that I am the identical person referred to in said certificate and passport; that I am domiciled in the United States, my permanent residence therein being at *Orange*, in the State of *New Jersey*, where I follow the occupation of *Steamer*; that I last left the United States on the 15th day of *June*, 1889, on board the *Angola*, arriving in *Paris* the 21st day of *June*, 1889; that I have resided in *Paris* since the 27th day of *June*, 1889; that I am now temporarily residing at .....; and that I intend to return to the United States *January*, with a purpose of residing and performing the duties of citizenship there.

I desire the passport for the purpose of *travelling*, *and* *returning*.

## OATH OF ALLEGIANCE.

Further, I do solemnly swear that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I take this obligation freely, without any mental reservation or purpose of evasion: So help me God.

LEGATION OF THE UNITED STATES AT

Sworn to before me, this 7th day of *September*, 1889,

## DESCRIPTION OF APPLICANT.

Age: 34 years.	Mouth: <i>medium</i>
Stature: 5 feet 3 inches, Eng.	Chin: <i>round</i>
Forehead: <i>medium</i>	Hair: <i>dark</i>
Eyes: <i>brown</i>	Complexion: <i>fair</i>
Nose: <i>regular</i>	Face: <i>oval</i>

## IDENTIFICATION.

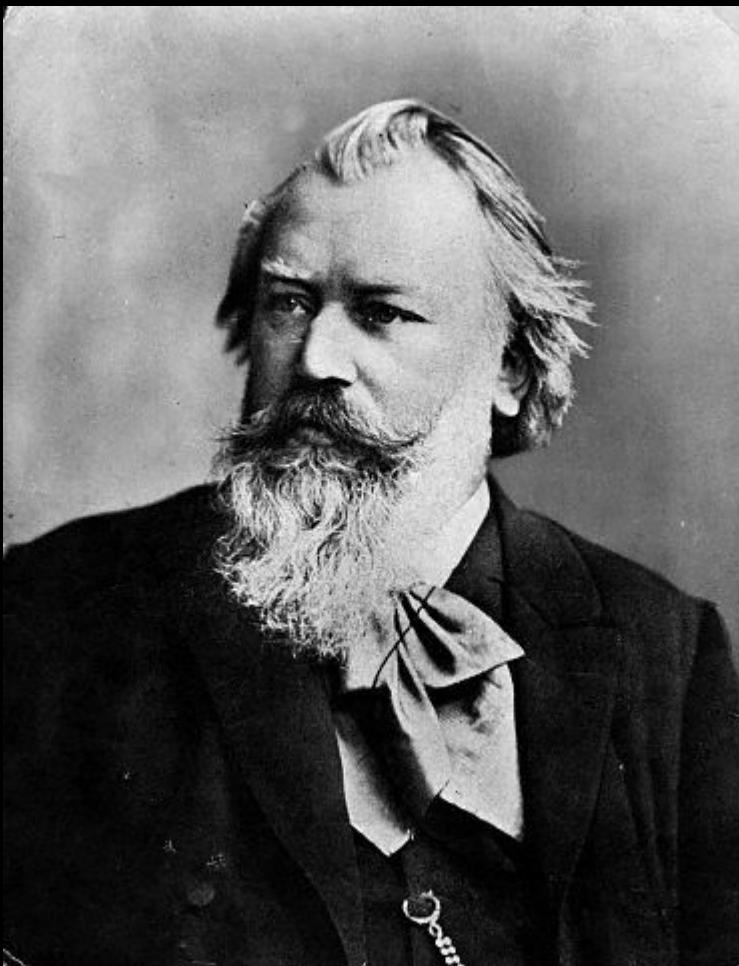
18.....

I hereby certify that I know the above named ..... personally, and know him to be the identical person referred to in the within-described Certificate of Naturalization, and that the facts stated in his affidavit are true to the best of my knowledge and belief.

[Address of witness] .....

NOTE.—This form is to be filled out in duplicate, one copy being retained on the files of the Legation and the other forwarded with the quarterly returns to the Department of State. It may be so filled out by the applicant, in which case no fee therefor is chargeable.





Johannes Brahms,  
Hungarian Dance #1,  
recorded in Vienna on  
2 December 1889

Alfred Grünfeld (1852-1924), self-composed Hungarian Rhapsody, recorded in Vienna on 18 November 1889

EDIS 93960



Otto Neitzel (1852-1920), *Piano Concerto No. 2 in F minor, 3rd movement* (adaptation) by Frédéric Chopin, recorded in Cologne, 23 January 1890



EDIS 93948



# First Chopin recording released by US museum

2nd February 2012

 SHARE

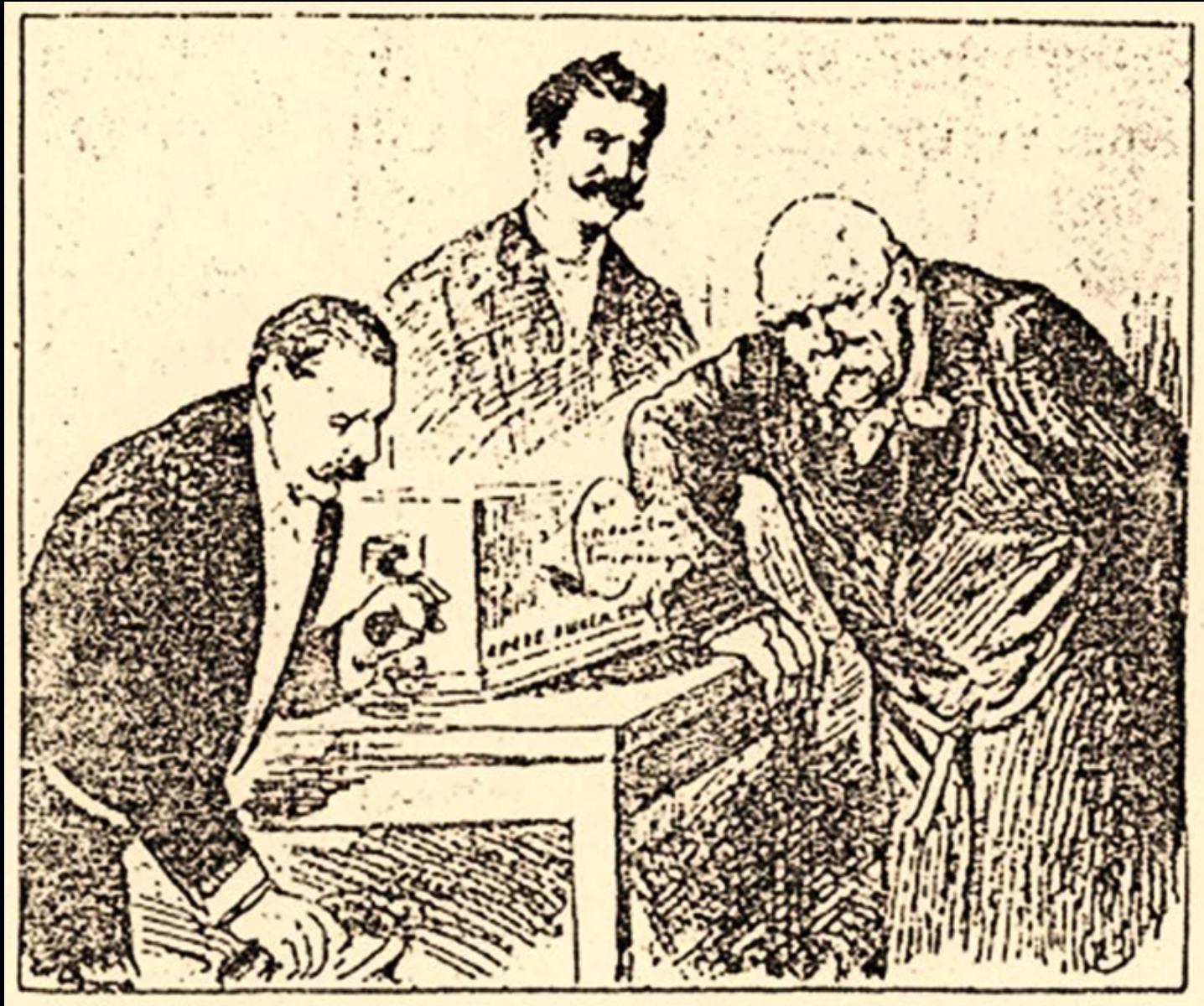
The first-ever recording of Chopin's Piano Concerto No. 2 in F minor can now be heard



Courtesy of Wikimedia Commons

The Thomas Edison National Historical Park museum in the US has released what is thought to be the first-ever recording of Polish-born composer Fryderyk Chopin's music.

In 1957, 17 wax cylinders containing recordings of speeches by former German Chancellor Otto von Bismarck, Chopin's Piano Concerto No. 2 in F minor, and significant historical recordings of famous German and Hungarian musicians, were discovered in an unlabeled box in Thomas Edison's laboratory in



Otto von Bismarck (1815-1898)

[Wangemann:] Friedrichsruh am  
siebten Oktober  
achtzehnhundertneunundachtzig.

Friedrichsruh on the  
seventh of October  
1889.

[Bismarck:]

In good old colony times,  
When we lived under the King,  
Three roguish chaps fell into  
mishaps  
Because they could not sing.

Als Kaiser Rotbart lobesam  
Zum heil'gen Land gezogen kam,  
Da mußt er mit dem frommen Heer  
Durch ein Gebirge wüst und leer.

When good Emperor Redbeard  
Was journeying to the Holy Land,  
He had to go with his pious army  
Through mountains desolate and  
empty.

Gaudeamus igitur,  
juvenes dum sumus.  
Post jucundam juventutem,  
post molestam senectutem  
nos habebit humus.

Let us rejoice, therefore,  
While we are young.  
After a pleasant youth  
After a troubling old age  
The earth will have us.

Allons enfants de la Patrie  
Le jour de gloire est arrivé!  
Contre nous de la tyrannie  
L'étandard sanglant est levé.

Arise, children of the Fatherland,  
The day of glory has arrived!  
Against us of tyranny  
The bloody banner is raised.

Treibe alles in Maßen und  
Sittlichkeit, namentlich das  
Arbeiten, dann aber auch das  
Essen, und im Übrigen gerade auch  
das Trinken.  
  
Rat eines Vaters an seinen Sohn.

Do everything in moderation  
and morality, namely work,  
but then also eating, and  
apart from that especially  
drinking.  
  
Advice of a father to his son.

In den Nachrichten: [Christian Wulff](#) | [Rudi Assauer](#) | [Kälteeinbruch](#) | [Ägypten](#)

DIE WELT

01.02.2012 | Autor: Sven Felix Kellerhoff

## Bismarcks Stimme aus dem Grab

Eine 123 Jahre alte Aufnahme beweist: Der Eiserne Kanzler hatte keine Fistelstimme

EDIS 93952

Generationen deutscher Schüler haben gelernt, dass Otto "fast frauenhaft schwaches" Organ gehabt habe, geradezu. Doch nur weil das in unzähligen Biografien und Schulbüchern nicht wahr sein. Jetzt kann man sich im Internet davon überzeugen: 123 Jahre nach der Aufnahme und 114 Jahre nach Bismarcks Tod wieder die Stimme des Eisernen Kanzlers (1815-1898) zu h





Helmuth von Moltke



Kreisau (Krzyżowa)

**[Wangemann:]** Kreisau am, uh-Schlesien, am einundzwanzigsten Oktober, achtzehnhundertneunundachtzig.

**[Moltke:]** Diese neueste Erfindung des Herrn Edison ist in der Tat staunenswert. Das Telephon ermöglicht, dass ein Mann, der lange schon im Grabe liegt, noch einmal seine Stimme erhebt und die Gegenwart begrüßt.

Diese neueste Erfindung des Herrn Edison ist in der Tat staunenswert. Der Phonograph ermöglicht, dass ein Mann, der schon lange im Grabe ruht, noch einmal seine Stimme erhebt und die Gegenwart begrüßt.

Kreisau, on the, uh-Silesia, on the twenty-first of October, 1889.

This newest invention of Mister Edison is indeed astonishing. The telephone makes it possible for a man who has already lain long in the grave once again to raise his voice and greet the present.

This newest invention of Mister Edison is indeed astonishing. The phonograph makes it possible for a man who has already rested long in the grave once again to raise his voice and greet the present.

“Herr Wangemann is here with Mister Edison’s telephone and is currently....”



REBECCA J. ROSEN - Rebecca J. Rosen is an associate editor at *The Atlantic*. She was previously an associate editor at *The Wilson Quarterly*, where she spearheaded the magazine's In Essence section.

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## Edison's Files Reveal the Only Known Voice Recording of Someone Born in the 18th Century

JAN 31 2012, 3:24 PM ET 11



6



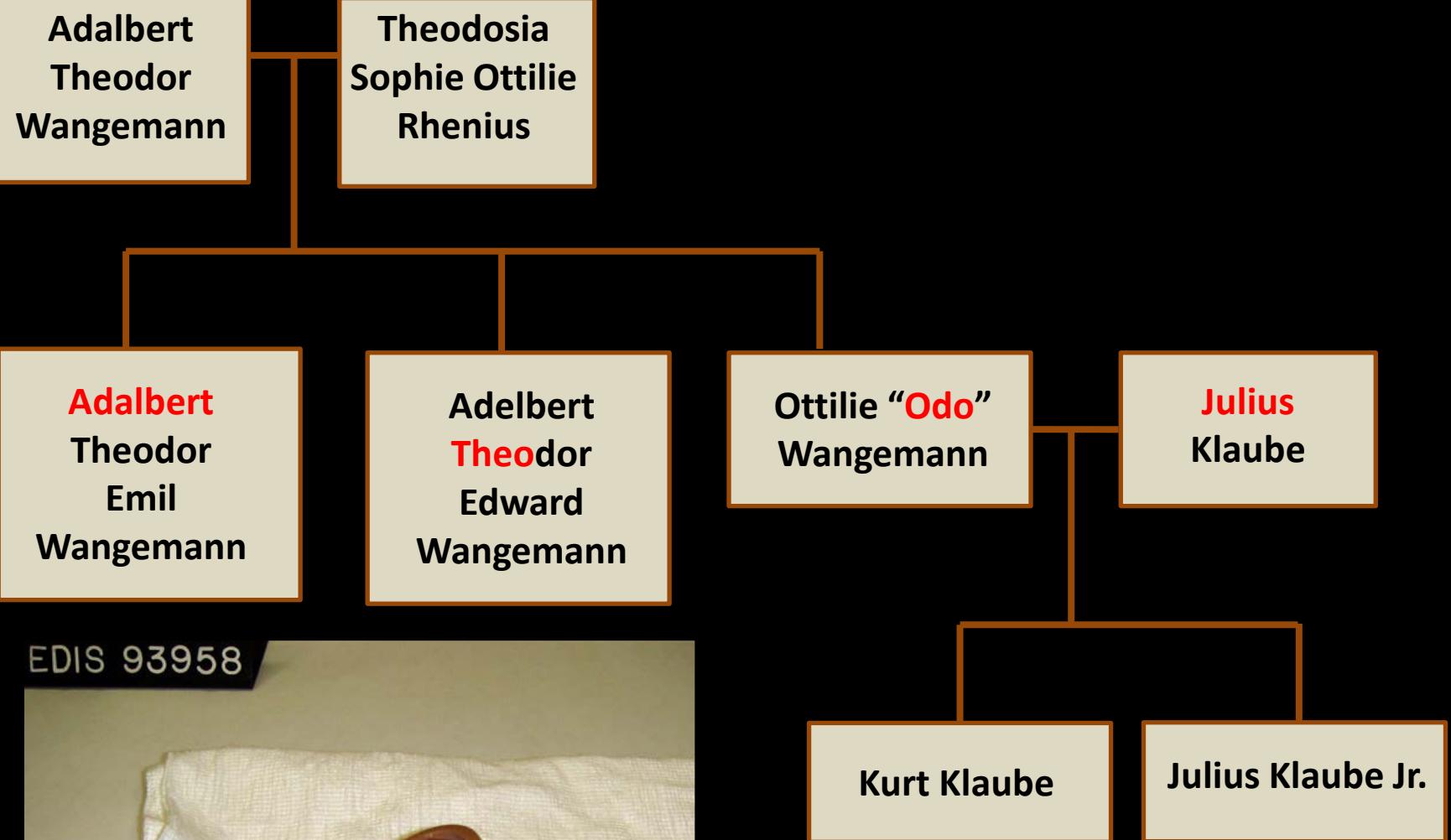
Recommend

145

Many of the most significant moments of the 20th century are written in our brains not as naked text but as memory traces. We think of Neil Armstrong's first steps on the moon. We know about the atomic bomb.



Helmuth von Moltke, der große Schweiger  
(1800-1891)



### [Adelbert Theodor Emil Wangemann:]

Altenkirchen, den Vierzehnten, ah,  
Januar 1889 [sic. 1890]. Lieber Adalbert,  
ah, hier ist, ah ah, die Odo und, ah, Julius  
und die Kinder und wir wollen Dir alle  
etwas sagen. Theo.

### [Ottilie "Odo" (Wangemann) Klaube:]

Lieber Adalbert, wir freuen uns sehr dass  
wir durch den Phonograph selber etwas  
sagen können. Wir haben ein sehr  
gemütliches Weihnachtsfest zusammen  
gefeiert und haben uns sehr gefreut dass  
Theo und Anne bei uns waren und  
hoffen dass Ihr auch bald mal zu uns  
kommt. Wär ich sehr über [...]. Lasst  
recht gut gehen und denkt zuweilen an  
Eure Odo.

[Julius Klaube:] Sehen wir Euch bald  
wieder bei uns. Julius.

Altenkirchen, the fourteenth of, ah,  
January 1889. Dear Adalbert, uh, here  
is, uh, uh, Odo and, uh, Julius and the  
children and we all want to say  
something to you. Theo.

Dear Adalbert, we're happy that we can  
say something to you through the  
phonograph ourselves. We have  
celebrated a very cozy Christmas  
together and were very happy that  
Theo and Anne were with us and hope  
that you will soon come to us too. I'd be  
very [...] about [...]. Hope things are  
going well, and think from time to time  
of your Odo.

Hope we'll see you with us again soon.  
Julius.

Paris

1889-07-14

Thomas A. Edison

PARIS EXPOSITION

LABORATORY  
LLEWELLYN PARK, ORANGE  
NEW-JERSEY U.S.A.  
CABLE ADDRESS "EDISON NEW-YORK"

BUREAU EDISON  
"PALAIS DES MACHINES"  
Avenue de Le Bourdonnais  
CABLE ADDRESS "NEWARK PARIS"

Paris July 14<sup>th</sup> 1889.

Mr Thomas A. Edison,

Dear Sir,

On my arrival here I found as expected the phonograph running scratchy, some records fair & ~~some~~ <sup>all</sup> faltering with either to deep or to light a cut. I have worked daily from 9<sup>00</sup> to 11 o'clock P.M. in the exhibition helping partly Mr Hammer & instructing the boys on all points & making records & showing the Phon to important & prominent people visiting the Gallerie des Machines. Mr Hammer having been ill with fever, I had to take right hold in the Exposition. The Phonograph now is run what I consider to your satisfaction. Few days after my arrival the jury of the Phonograph class came & I arrived just in time to show off the phon. well <sup>to them</sup>.

14 July 1889

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Ah, aahaahaah, oohoooh !

Bonjour Monsieur le  
Graphophone,  
racontez-nous quelque  
chose s'il vous plaît.

Ah, aahaahaah, oohoooh !

Good day, Mister  
Graphophone,  
tell us something  
if you please.



# Chanson de Fortunio

Nous allons chanter à la ronde,  
Si vous voulez,  
Que je l'adore  
et qu'elle est blonde  
Comme les blés.

We'll sing in rounds,  
If you want,  
For I adore her  
and she is blonde  
As the corn.



“The phonograph makes it possible for a man who has already rested long in the grave once again to raise his voice and greet the present.”

—Helmuth von Moltke

