

Please sign-in with the sign-in sheet

TECH 101
TECH 101
TECH 101



“TAPE MUSIC”
before 1960

***...but first, a detour to
records...***

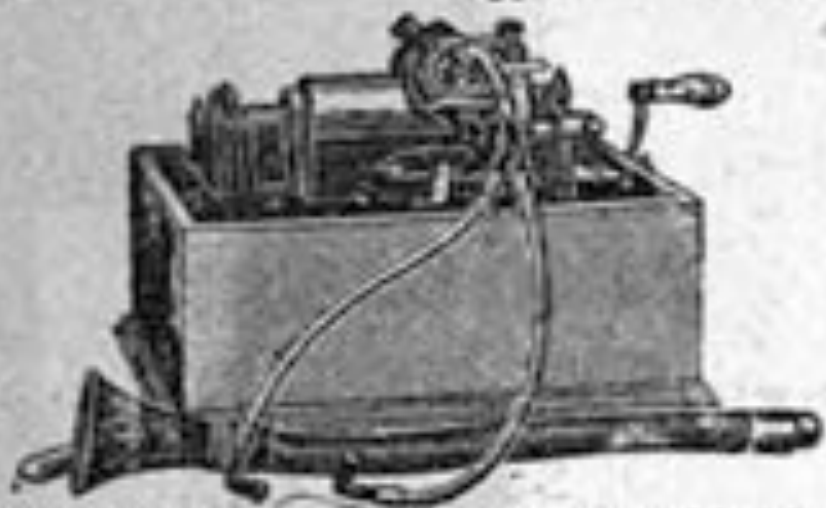
PHONOGRAPH

Invented 1877



THE
EDISON
 NEW STANDARD
PHONOGRAPH.

PRICE **\$20 COMPLETE**



EDISON NEW STANDARD, \$20.00.
 " Home Phonograph, 30.00.
 " Spring Motor " 75.00.
 " Electric " " 75.00.

ALL GENUINE PHONOGRAPHS bear
 this signature:

TRADE
Thomas A Edison
 MARK

Catalogue No. 3 free from the

NATIONAL PHONOGRAPH CO.,

St. James Building, Broadway & 26th St., New York.

Edison records 50 cents each, \$5.00 per dozen.

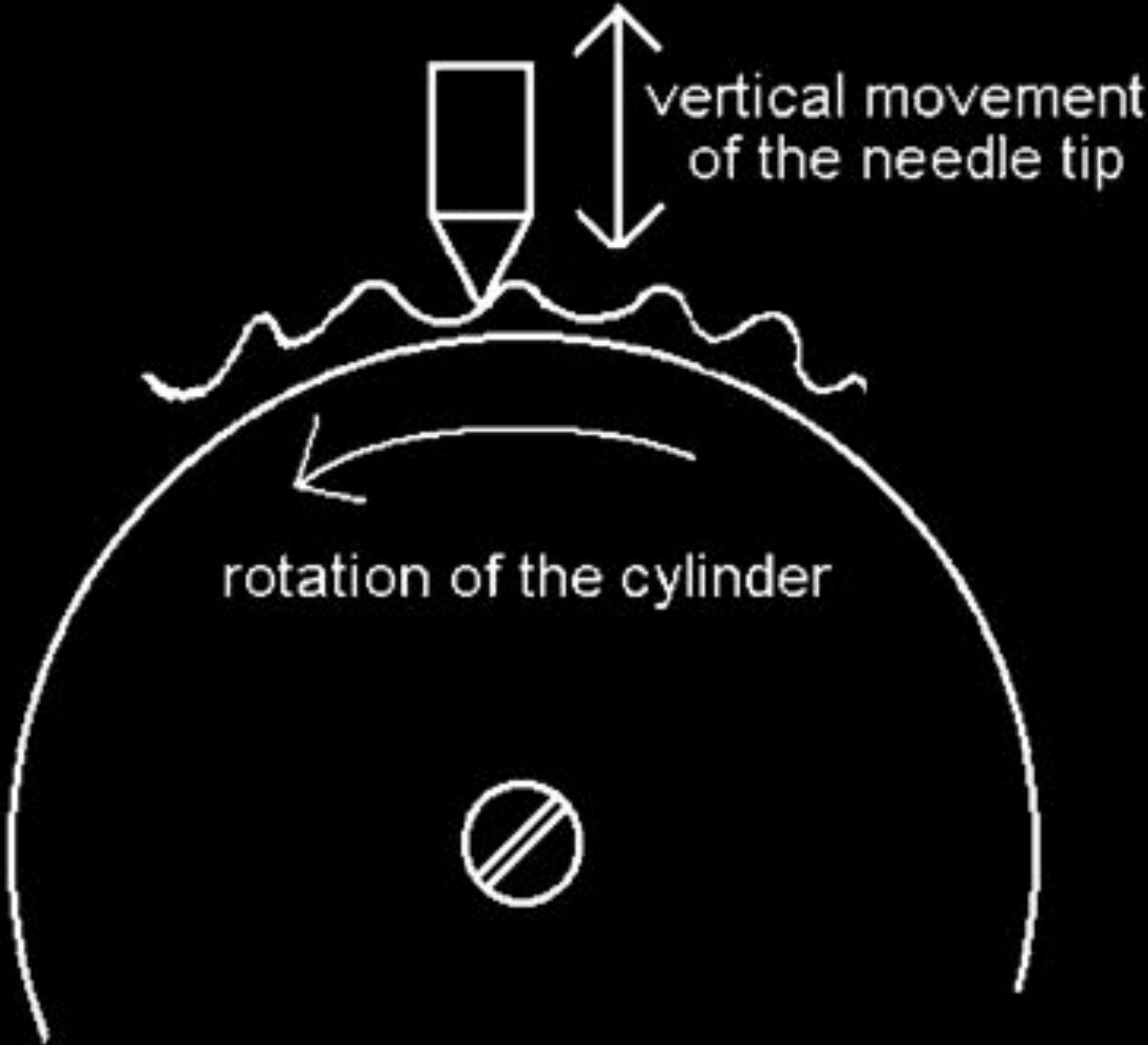
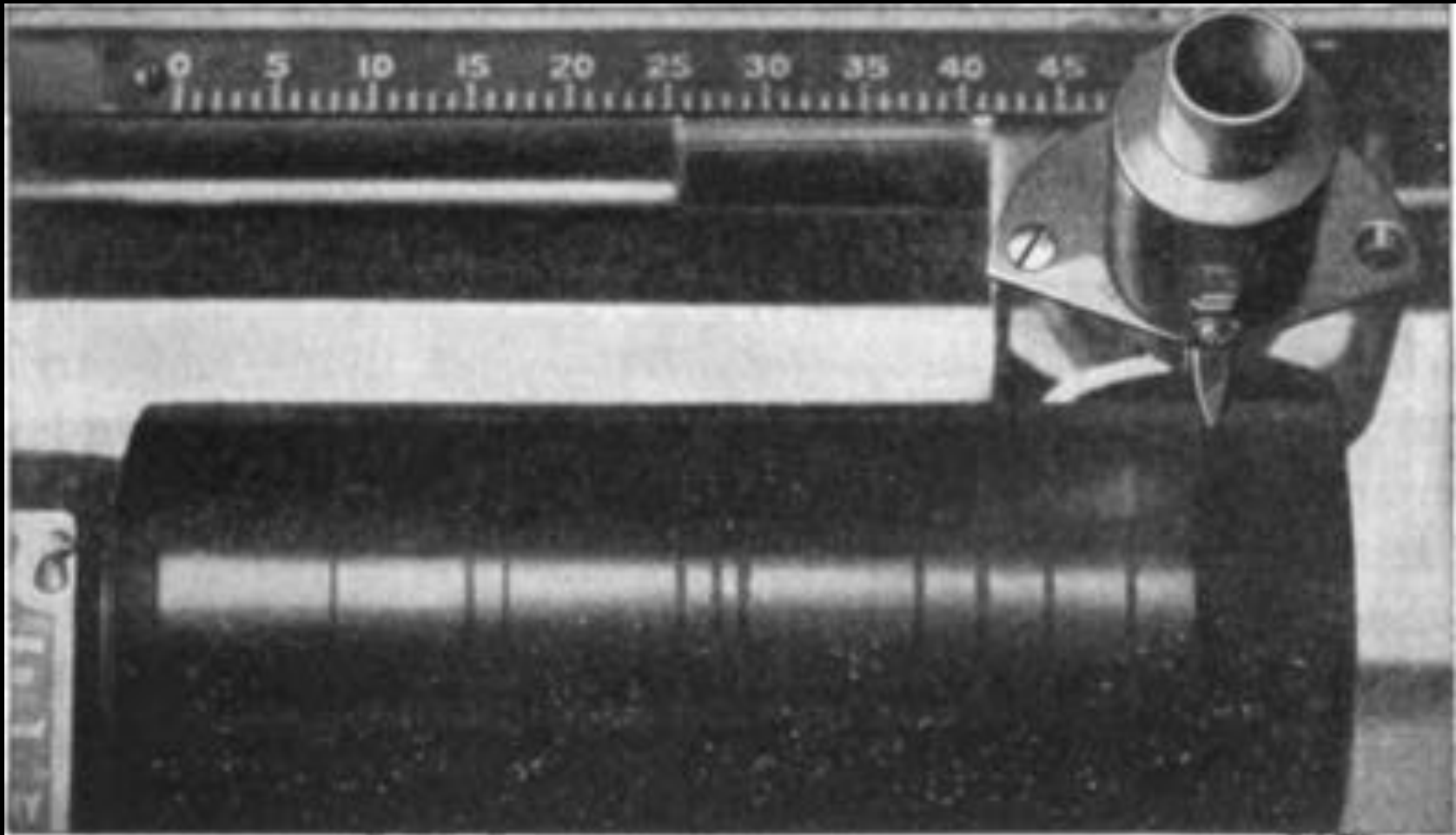
Produces the
 same results as the
 other famous
 models of the
**GENUINE
 EDISON
 PHONOGRAPH,**
 using the same
 records and the
 same reproducer.
 Simplest, most
 durable, and
 cheapest talking-
 machine.

“...I don't want the phonograph sold for amusement purposes, it is not a toy. I want it sold for business purposes only.”

Edison

Vertical Cuts

“Hill and Dale”



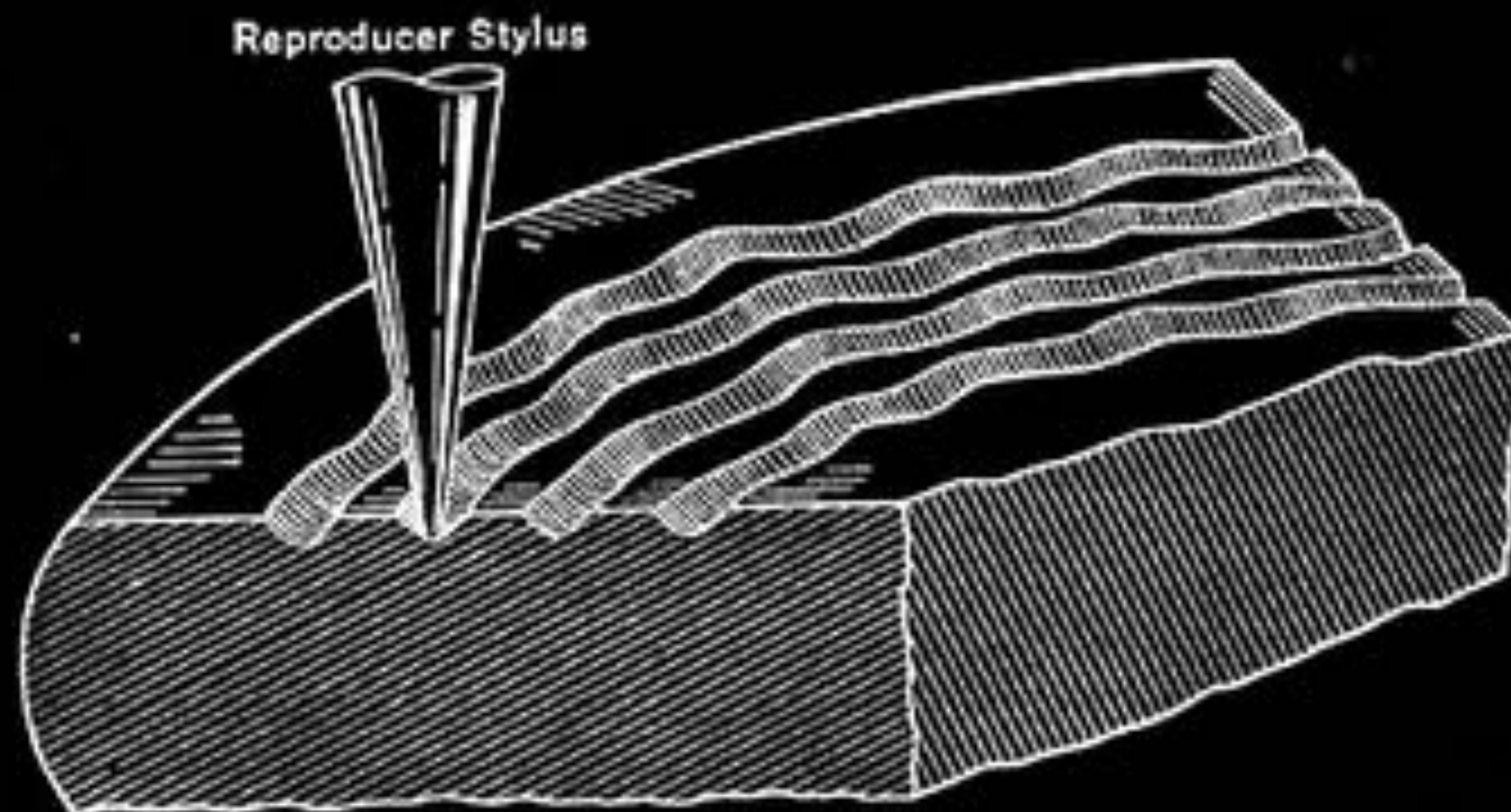
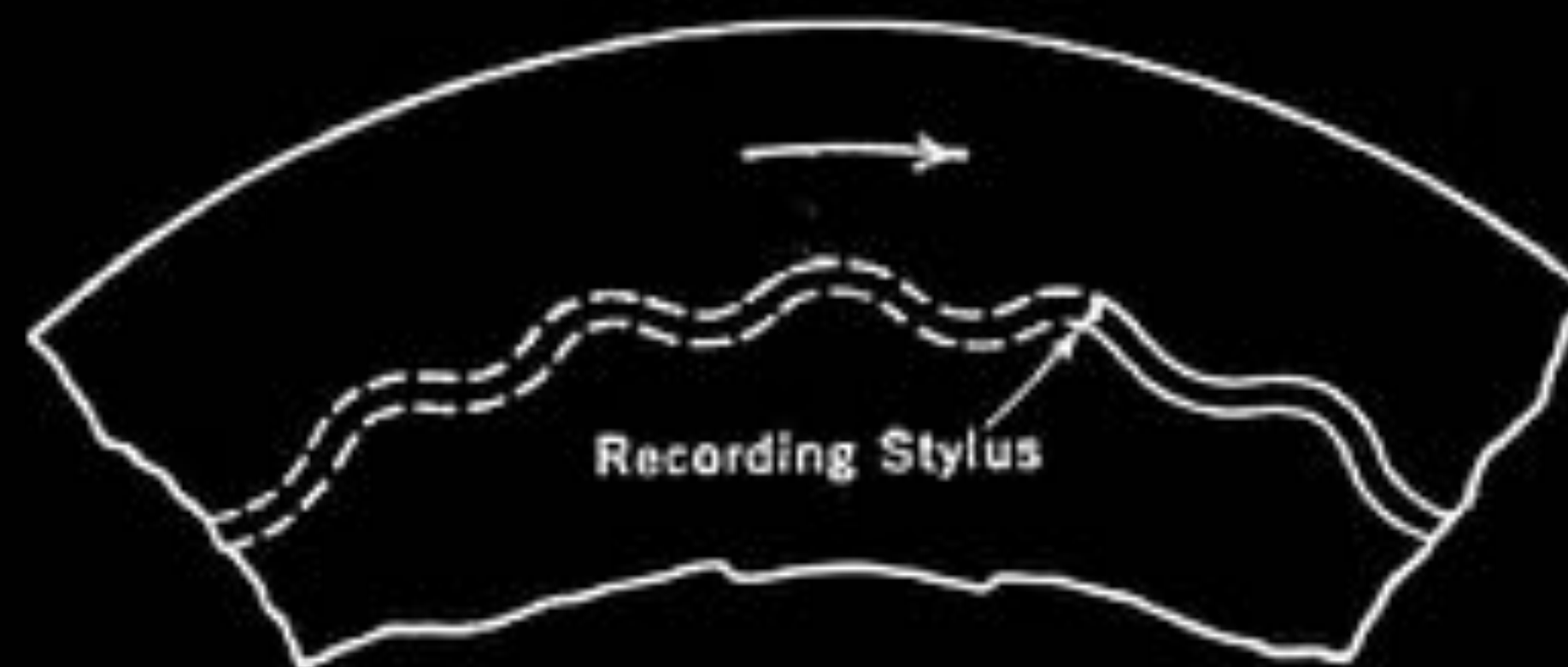
GRAMOPHONE

Emile Berliner in 1887



Lateral Cuts

Stylus moves horizontally



CYLINDER VS. DISC

(PHONOGRAPH VS. GRAMOPHONE)





RECORDING PROCESS



ELECTRICAL RECORDING

first electrically recorded discs in 1925



RECORD FORMATS

YEARS	TYPE	RECORDING TIME	...
1888-1929	Cylinder	2-4 minutes	
1900-40s	78 rpm	3-5 min per side	
1948 -	LP (33 1/3 rpm)	15-30 mins per side	album (12")
1949	45 rpm	4-6 per side (EP 7m)	single (7")

JOHN CAGE



1939 Imaginary Landscape #1 - records of audio test tones played on two variable speed turntables, with percussion and piano.



Christian Marclay



TRIO

Maria Chavez

Book of Abstract Turntable Techniques





...and now back to tape music pre-1960...

WIRE RECORDER

invented 1898



Halim El-Dabh

First known composer of tape music

The Expression Of The Zaar (1944)





ELECTRONIC MUSIC RESEARCH CENTERS

TO RECORD OR TO SYNTHESIZE

Music Concrete	Elektronische Musik
France	Germany
Recorded Sounds	Synthesized Sounds
Montage, Film	Art Music, Serialism
Pierre Schaeffer	Herbert Einmert

9/20 More History of Electronic Music I: Musique Concrète from 1940s to the Present, ocenaudio II: Advanced, Digital Audio I

HW: Single track editor play: using **sounds the class recorded during the Scavenger Hunt**, create a **10-15 second** (no more, no less) exploration of sound editing and processing using ***all*** of the techniques outlined on the Help Sheet [here](#). Submit it to [this Box folder](#). Have fun!

Read [The Art of Noise by Luigi Russolo](#)

Listen to [“Plåtmås” by Hanna Hartman](#) and [“I am sitting in a room” by Alvin Lucier](#) (listen to first ~5 minutes, then seek around afterwards)