

# The Gramophone

— Invented by —

E. Berliner



It actually "Etches the Human Voice"





THE GRAMOPHONE is an apparatus for making permanent records of the human voice or other sounds, including music of all kinds and for reproducing the same at any time thereafter as often as desired. It differs essentially from all other talking machines in the following features of vital importance:

*The working principle of the Gramophone is absolutely independent of all other patents, and historical records show that it contains the oldest conception for the preservation and reproduction of sounds.*

1. It reproduces the voice in its natural quality, is in no sense a machine-voice, but such a veritable *human* reproduction that any articulation is instantly recognized by those familiar with it.

2. It reproduces sounds with such a volume that they can be heard distinctly in all parts of a very large room.

3. The records are of hard rubber, solid metal or other indestructible material and can therefore be handled without fear of breaking or injuring them.

4. The sound records are grooves of even depth but of varying direction, as opposed to those of straight lines and various depths in the Phonograph and Graphophone.

5. *These records can be multiplied at will to any extent, and each copy will sound precisely like the original.*

6. As the reproducing machine has no gearing or other intricate mechanism, even children can operate it without the risk of derangement.

7. Voices may be analyzed by studying the beautiful record curves which they show in phonautograms printed from original record plates.

What others have for years periodically promised, the Gramophone has now crytallized into *actual achievement*.

## A Scrap of History

The BERLINER GRAMOPHONE bears but little resemblance to the Phonograph or the Graphophone.



It is based on the Leon Scott Phonautograph, which was invented nearly forty years ago, and which traced sound as *curvilinear lines* upon the smoked surface of a brass cylinder by means of a diaphragm with a stylus attached to its center.

Early in 1877, *or six months before the discovery of the phonograph* principle by indenting tin-foil or wax, Mr. Charles Cros, of Paris, had conceived and placed on file the theory that if the curvilinear record of a Scott Phonautograph be photo-engraved, and such an engraving be made to act again on a stylus attached to a diaphragm, the original sound would be reproduced with absolute accuracy.

*This was the first conception of a sound-reproducing machine.*

Mr. Cros, however, did not put his idea into practical operation, presumably on account of the many technical difficulties which had to be overcome in order to accomplish it.

A few years ago Mr. Berliner undertook to reproduce the human voice on a *similar* principle, and after much study and experimenting, secured fundamental patents covering the general process and its essential details.

In his machine, which he called the GRAMOPHONE (from phonautogram or phonautographic record), the voice is first traced in curvilinear lines as in the Scott machine, but on a metal plate covered with a very delicate layer of fatty etching ground, and the lines are then "etched" into the metal plate by immersing the same in acid.

From this faithfully etched record the voice can readily be reproduced, and copied at will by electrotyping or other modes of multiplying.

## Practical Suggestions

A standard reproducing apparatus, simple in construction and easily manipulated, is now placed on the market at a selling price low enough to bring it within the reach of all.

Those having one of these machines may buy an assortment of Phonautograms, which can be increased indefinitely, comprising recitations, lessons in elocution, songs, choruses, instrumental solos, or orchestral pieces of every variety.

These discs are generally of hard rubber; will stand any climate, and practically last forever.



A 7-inch disc will contain a two-minute letter in the speaker's own voice, and it may be mailed to friends all over the earth in a large envelope for a few cents postage.

Collections of these Phonautograms will become very valuable, and whole evenings may be spent at home in going through a long list of interesting performances.

Foreign languages and elocution will eventually be taught by the Gramophone with perfect facility.

A singer unable to appear at a concert may forward his or her voice and so be represented as per programme, and Conventions may listen to sympathizers, be they distant thousands of miles.

Etched records can be printed, and from such prints other etched plates, sounding precisely like the original, may be produced at will by the photo-engraving process.

Future generations will be able to condense into the brief space of twenty minutes the tone pictures of a lifetime—five minutes of childish prattle, five of boyish exultation, five of the man's mature reflections, ending with five moments embalming the last feeble utterances from the death-bed. Will this not seem like holding veritable communion with immortality?

From what has been stated it will be seen that the BERLINER GRAMOPHONE is to the voice what photography is to the features—*i. e.*, a simple, practical medium for securing accurate and lasting records.

### — Price List —

Seven-Inch Hand Machine, with Horn	. \$12.00
Hard Rubber Discs, per dozen	. 6.00



## Berliner Gramophone Company

General Offices at Factory

1026-1028 Filbert St.

Retail Salesrooms

1237 Chestnut St.

Philadelphia, Pa.