

(No Model.)

T. A. EDISON.
PHONOGRAM BLANK.

No. 382,462.

Patented May 8, 1888.

Fig. 1.

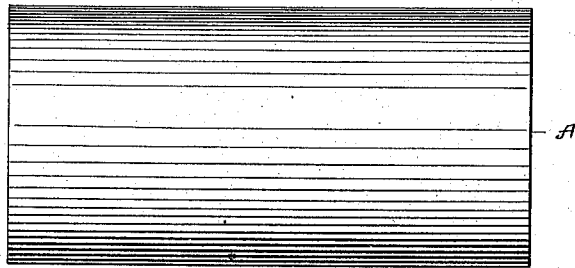


Fig. 2.

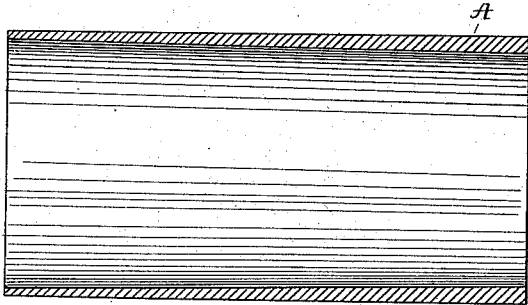
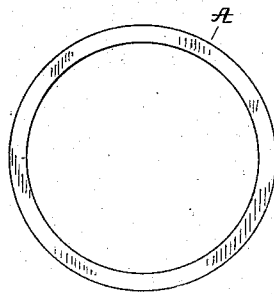


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF LLEWELLYN PARK, NEW JERSEY.

PHONOGRAM-BLANK.

SPECIFICATION forming part of Letters Patent No. 382,462, dated May 8, 1888.

Application filed January 5, 1888. Serial No. 250,898. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, of Llewellyn Park, in the county of Essex and State of New Jersey, have invented a certain
5 new and useful Improvement in Phonogram-Blanks and Phonograms, (Case No. 747,) of which the following is a specification.

I have found in practice that the most available surface for phonogram-blanks and phonograms is one composed of wax, gum, or other
10 plastic hydrocarbon. Such compounds, however, I find contract and expand under variations of temperature to a much greater extent than paper, wood, metals, and other similar
15 harder substances. While under ordinary conditions the wax or wax-like surface may not be injured by this difference in the coefficient of expansion, yet when subjected to extreme cold the contraction of the wax is so much greater
20 than the harder backing that the wax will crack and destroy the continuity of the surface. For instance, a phonogram-blank or phonogram may be subjected to a temperature of nearly 100° Fahrenheit at one time and at another time the temperature may fall below
25 zero. If the waxy substance is sufficiently hard at the high temperature to hold its shape under the pressure of one on the other in a packing-box, it will at the low temperature
30 harden and contract so greatly in excess of the backing of harder material that the wax will crack and render the surface useless.

The object I have in view is to produce a
35 phonogram-blank or phonogram which will have the wax or wax-like surface and will not be subject to the objection that has been stated. This I accomplish by constructing the phonogram-blank or phonogram wholly of the wax or wax-like material. I prefer to mold the entire
40 phonogram-blank of the one wax-like compound; but I may construct the base or

backing of the surface of a somewhat different mixture of wax or wax-like materials than that of which the surface is made, so long as the whole has substantially the same coefficient
45 of expansion.

My phonogram-blank I prefer to mold as a hollow cylinder with a tapering bore for slipping over the tapering phonogram-cylinder of
50 my phonograph.

In the accompanying drawings, forming a part hereof, Figure 1 is an elevation of the
55 phonogram-blank; Fig. 2, a longitudinal section thereof, and Fig. 3 an end view.

A is the cylindrical phonogram-blank,
60 molded of the plastic wax or wax-like material, as described, and having a tapering bore.

The invention is also applicable to duplicate
65 phonograms having the phonographic record thereon.

What I claim is—

1. A phonogram blank or phonogram constructed wholly of wax or wax-like materials
65 and having the same coefficient of expansion throughout its mass, substantially as set forth.

2. A phonogram-blank or phonogram constructed as a hollow cylinder wholly of wax or
70 wax-like materials and having the same coefficient of expansion throughout its mass, substantially as set forth.

3. A phonogram-blank or phonogram constructed as a hollow cylinder, with a tapering
75 bore wholly of wax or wax-like materials, and having the same coefficient of expansion throughout its mass, substantially as set forth.

This specification signed and witnessed this
5th day of December, 1887.

THOS. A. EDISON.

Witnesses:

WILLIAM PELZER,
E. C. ROWLAND.