

(No Model.)

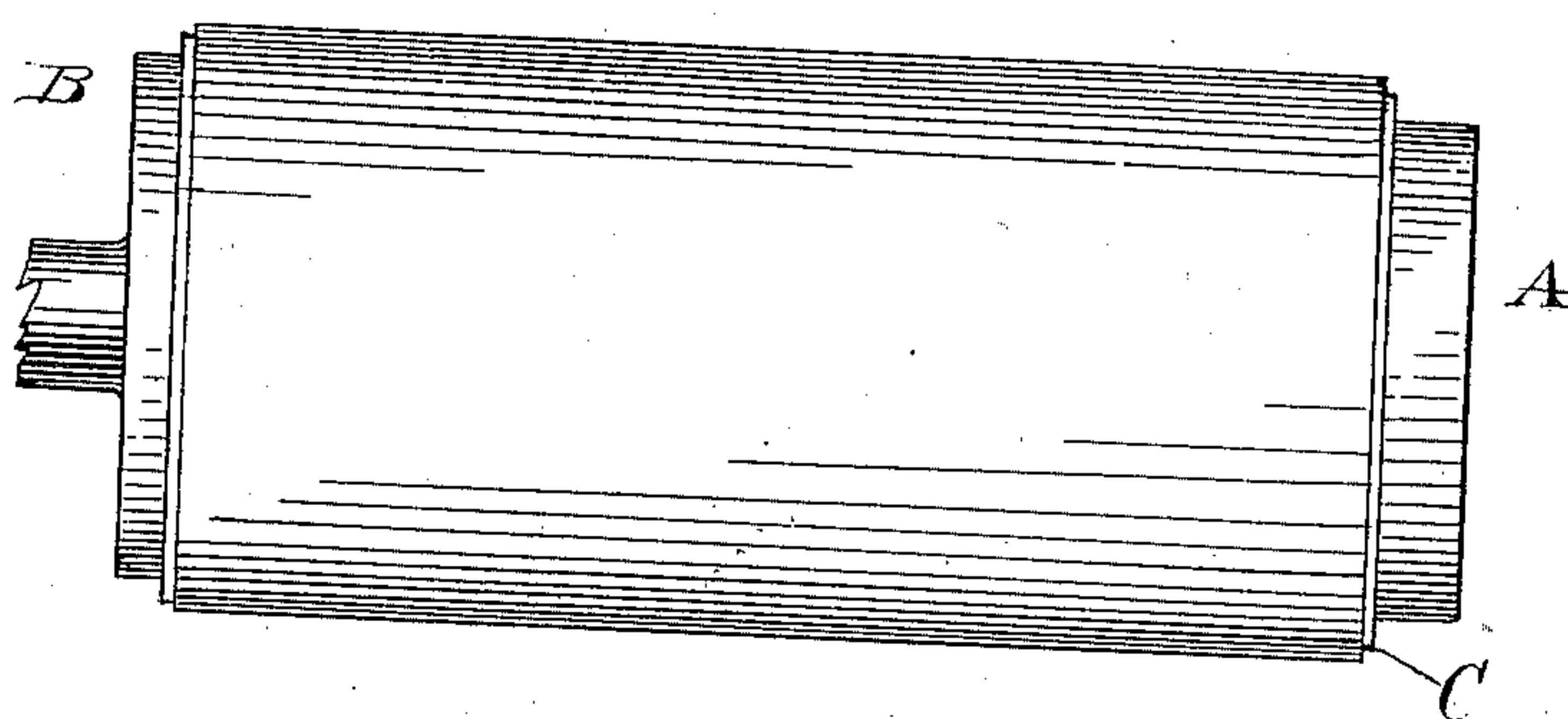
T. A. EDISON.

PHONOGRAPH.

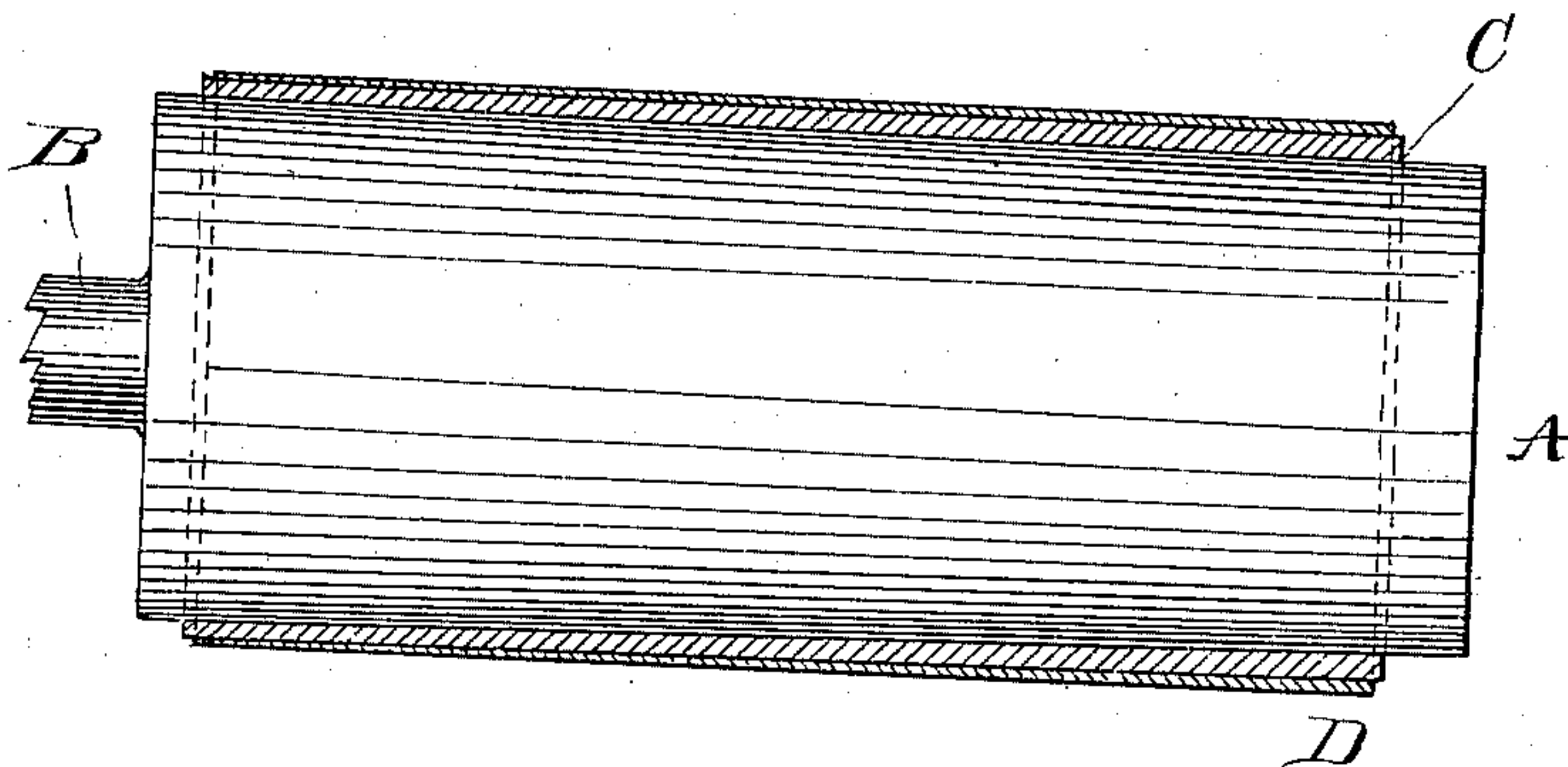
No. 397,706.

Patented Feb. 12, 1889.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*E. C. Rowland*  
*William P. Rye*

INVENTOR

*Thomas A. Edison*

BY

*John H. Ledy*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

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

## PHONOGRAPH.

SPECIFICATION forming part of Letters Patent No. 397,703, dated February 12, 1889.

Application filed October 11, 1888. Serial No. 287,844. (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 Phonographs, (Case No. 808,) of which the following is a specification.

The object of my invention is to permit of the use upon the tapering phonogram-cylinder  
10 of the phonograph of slightly-tapering or true cylindrical phonograms, such as paper cylinders covered with indenting material. I accomplish this by the use of a false shell having a substantially cylindrical shape, but with  
15 a tapering bore adapted to fit upon the tapering phonogram-cylinder, and preferably with a slight taper upon its external surface to enable it to receive a slightly-tapering phonogram-blank.

20 My invention is illustrated in the accompanying drawings.

Figure 1 is a front elevation of a phonogram-cylinder with a false shell and phonogram-blank placed thereon according to my  
25 invention, and Fig. 2 is an elevation of the phonogram-cylinder and longitudinal section of the false shell and phonogram-blank.

A is the ordinary tapering revolving phonogram cylinder of a phonograph, and B indicates a portion of the shaft which carries it.

30 C is the false shell, which is preferably made of metal, and which has a tapering bore, as shown, so that it is adapted to fit upon the tapering cylinder A. The outer surface of the false shell C is also tapered, but to a less  
35 degree than is its inner surface.

D represents the phonogram-blank, having a slightly-tapered bore, which may be a covered paper cylinder, the method of making

which is described in my application No. 807, 40 filed October 11, 1888, Serial No. 287,843.

It will be seen that the phonogram-blank D may be readily placed and held upon the false shell C, and that the false shell can then be  
45 slipped upon the phonogram-cylinder A, and the phonogram-blank D may then be used for recording or reproducing sound. It will be seen, also, that the use of the false shell makes it possible to employ with the same phono-  
50 graph either the considerably-tapered wax or other cylinders which have heretofore been commonly used or the slightly-tapered paper or other cylinders above described.

What I claim is—

1. The combination, with a phonogram-cyl- 55 inder, of a false shell for receiving the phonogram-blank, substantially as set forth.

2. The combination, with a tapering phonogram-cylinder, of a false shell having a tapering bore for receiving a phonogram-blank, 60 substantially as set forth.

3. The combination, with a phonogram-cylinder, of a false shell having a tapering bore, and a less tapering outer surface for receiving the phonogram-blank, substantially as set 65 forth.

4. The combination, with a tapering phonogram-cylinder, of a false shell having a tapering bore and a less tapering outer surface, and a phonogram-blank having a slightly-ta- 70 pering bore, substantially as set forth.

This specification signed and witnessed this 29th day of September, 1888.

THOS. A. EDISON.

Witnesses:

WILLIAM PELZER,  
E. C. ROWLAND.