No. 794,592. PATENTED JULY 11, 1905.

E. N. DICKERSON.

RECORD CYLINDER FOR PHONOGRAPHS.

APPLICATION FILED MAR. 22, 1897.

Fig. 1,

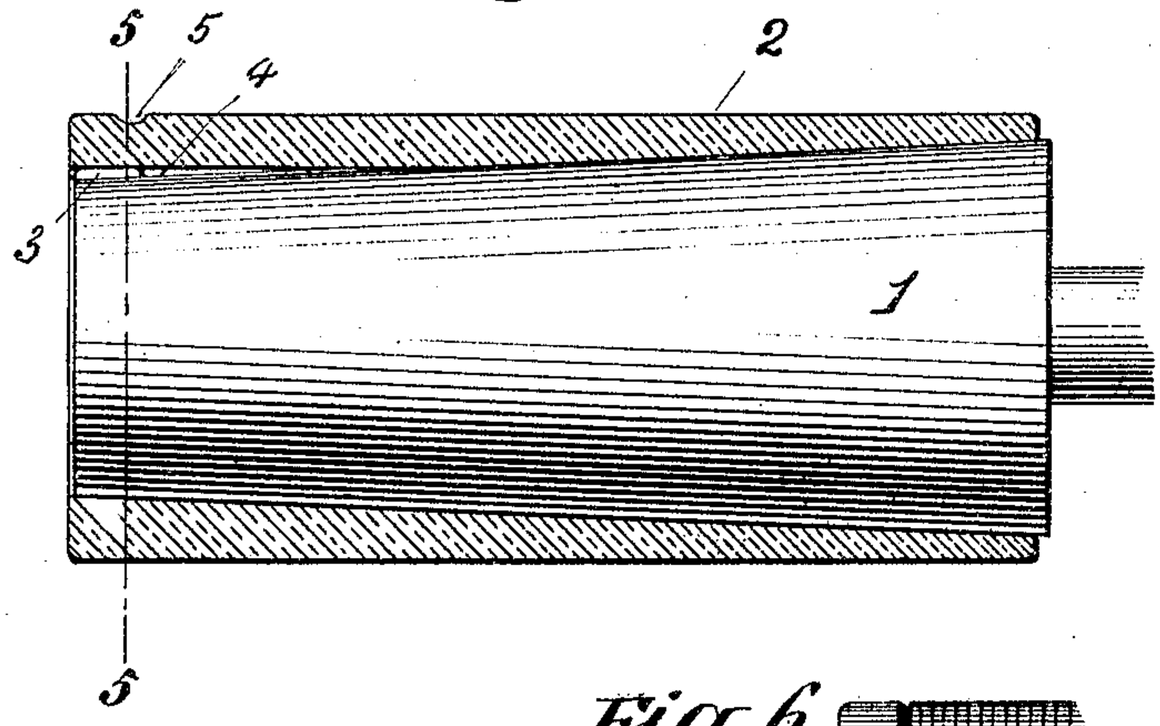


Fig. 2,

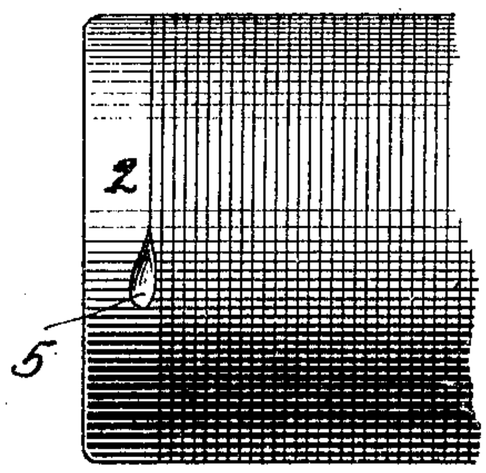


Fig. 6,

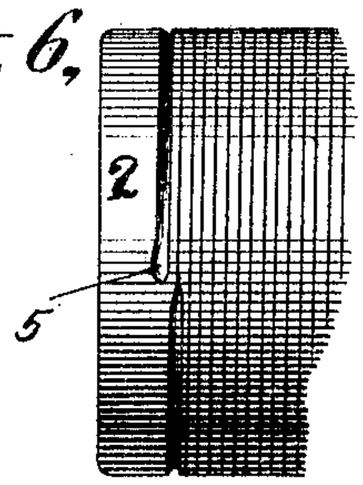


Fig. 3,

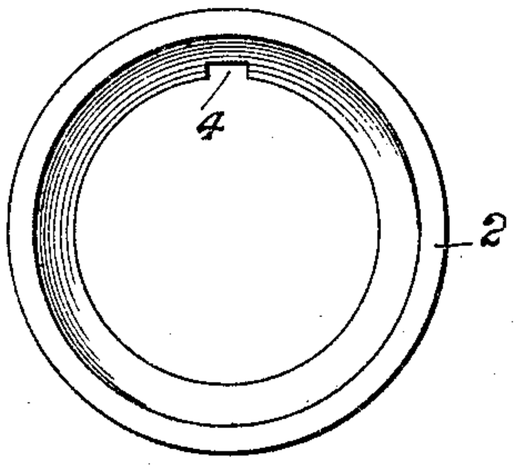


Fig. 5,

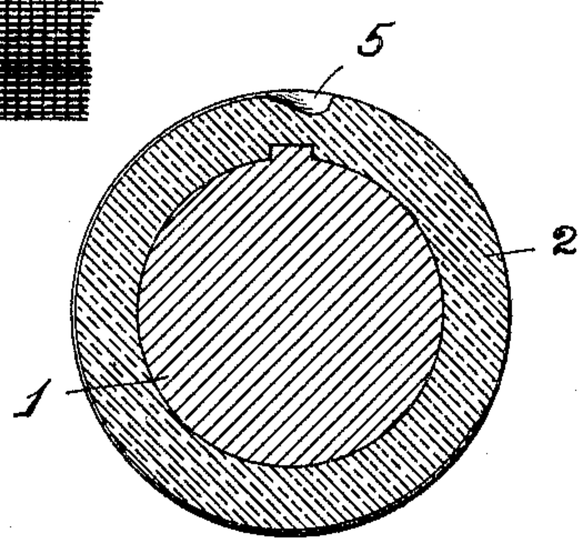
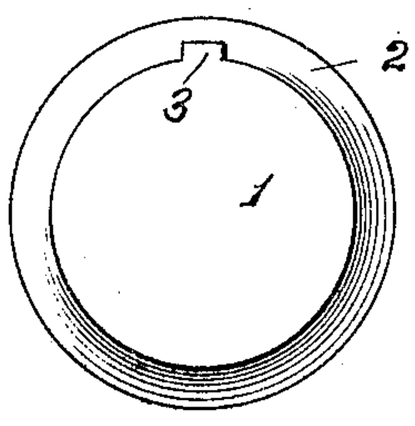


Fig. 4,



WITNESSES:

D. H. Hayward

H. Coutant

INVENTOR

E N Dickerson

No. 794,592. Patented July 11, 1905.

UNITED STATES PATENT OFFICE.

EDWARD N. DICKERSON, OF NEW YORK, N. Y.

RECORD-CYLINDER FOR PHONOGRAPHS.

SPECIFICATION forming part of Letters Patent No. 794,592, dated July 11, 1905.

Application filed March 22, 1897. Serial No. 628,639.

To all whom it may concern:

Be it known that I, EDWARD N. DICKERSON, of the city, county, and State of New York, have invented a new and useful Improvement in Record-Cylinders for Phonographs, of which the following is a specification.

My present invention relates to record-cylinders for phonographs and similar sound recording or reproducing instruments, and especially in such instruments to means for positively engaging the recording-cylinder with its support in such manner that it may be readily placed in operating position and removed therefrom. Besides this the invention contemplates providing the recording-cylinder of such an instrument with a starting-point for the stylus which shall guide and direct the stylus into the sound-record when the instrument is used to reproduce sounds previously recorded, and when the cylinder is used for the first time to receive a sound-record the placing of the stylus in the starting-point insures that the stylus shall be properly started to make a sound-record.

In the drawings I have illustrated a form of record cylinder and support embodying my invention.

In the said drawings, Figure 1 is a side elevation of the mandrel of a phonograph supporting the record-cylinder, this latter being shown in section. Fig. 2 is a side elevation of a record-cylinder, partly broken away. Fig. 3 is a view of the record-cylinder looking at the wider end opening. Fig. 4 is an end view of the record-cylinder and mandrel seen when looking in the direction opposite to that of Fig. 3. Fig. 5 is a transverse section along line 5 5 of Fig. 1, and Fig. 6 is a view showing a modification of my invention.

Like figures of reference refer to like parts throughout the several views of the drawings.

Referring to the drawings in detail, 1 represents a mandrel for supporting the record-cylinder, which mandrel is suitably supported in the phonograph apparatus and is provided with a plain tapering surface.

2 represents the record-cylinder, which is made of the usual wax or paraffin composition and is provided with a tapering inner surface conforming to the shape of the mandrel. Upon the mandrel at the narrow end thereof is a stop 3, inclined to the surface thereof, engaging in a recess 4, similarly inclined on the inner surface of the record-cylinder. While the stop and the recess are shown with parallel sides, they may be formed with the sides inclined to or from each other for a part or the whole of their length to facilitate the engagement of the stop with the recess. On the outer surface of the record-cylinder, commencing at a point directly or approximately over the stop 3, the record-cylinder is provided with a groove 5, gradually tapering toward the surface of the cylinder. This groove is for the purpose of receiving the stylus and serving as a starting-point therefor. When the cylinder is placed in position to receive a record, the stylus is placed in the groove (which may be colored to emphatically distingush it from the rest of the cylinder) and the instrument set in operation to receive the sound-record. When it is desired to reproduce this record, the recess or groove is plainly apparent to the eye, and the stylus-point being placed therein and the instrument set in operation the groove guides the stylus-point into the line of indentations constituting the sound-record, and thus obviates all difficulty in finding the starting-point of the sound-record and placing the stylus therein, hence precluding all possibility of injuring the sound-record by misplacing the stylus-point. This groove may be comparatively short, as shown in Fig. 2, but I prefer to make it as shown in Fig. 6, since in this way it may be readily distinguished at whatever point of revolution the cylinder may be. By placing the stop 3 in definite relation to the starting-point 5 it is plain that an indication of position either upon the mandrel 1 or upon the shaft will readily indicate the proper starting-point for the stylus in case it is desired to start the same at the commencement of the deeper groove.

It is plain that so far as the guiding-groove is concerned this invention is applicable as well to spirally-grooved plates as to spirally-grooved cylinders.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A sound-record tablet provided with a

sound-record groove, and a wider stylus locating and guiding groove merging into the starting end of said record-groove.

2. A sound-record tablet provided with a sound-record groove and a wider and deeper stylus locating and guiding groove merging into the starting end of said record-groove.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

E. N. DICKERSON.

Witnesses:

W. LAIRD GOLDSBOROUGH,

H. CONTANT.