No. 739,421. PATENTED SEPT. 22, 1903.

E. R. JOHNSON.

SOUND RECORD FOR TALKING MACHINES.

APPLICATION FILED AUG. 8, 1900.

NO MODEL.

Fig. 1.

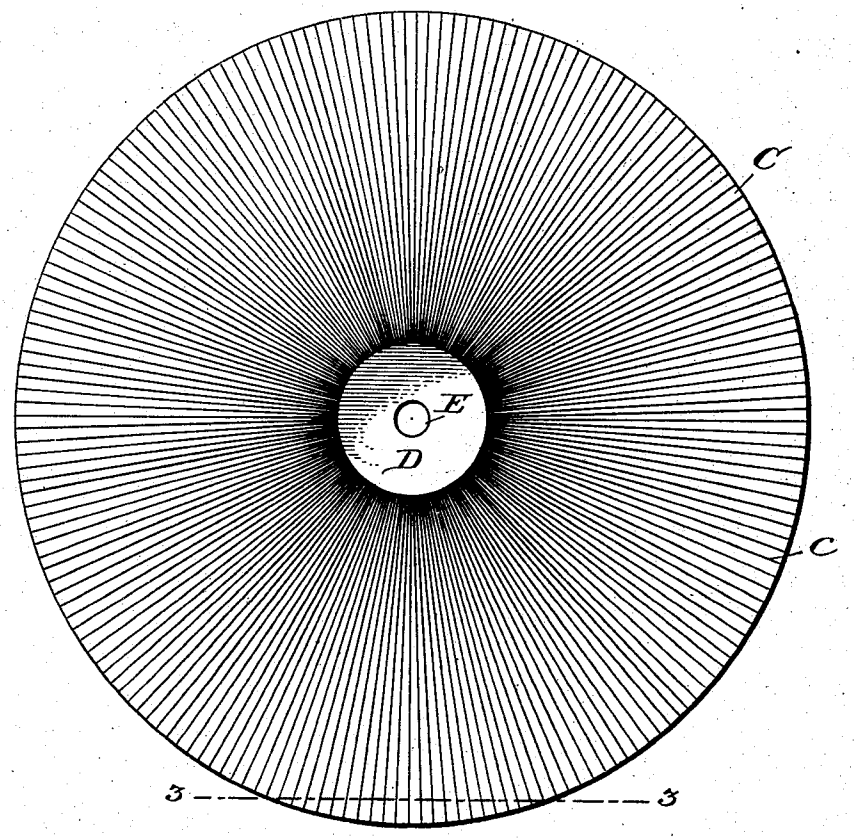


Fig. 2.

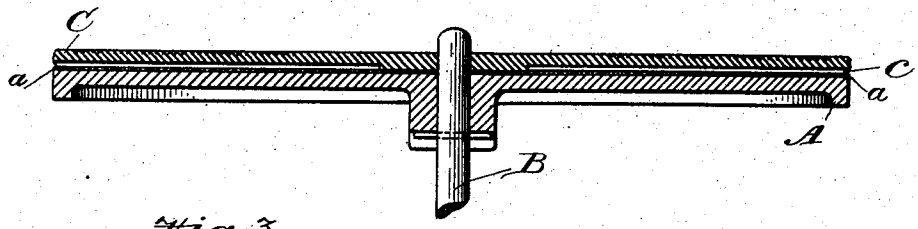


Fig. 3.



Witnesses.
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Chas. K. Fennoth

Inventor,
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by Howard Ellis.
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 739,421. Patented September 22, 1903.

UNITED STATES PATENT OFFICE.

ELDRIDGE R. JOHNSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO VICTOR TALKING MACHINE COMPANY, A CORPORATION OF NEW JERSEY.

SOUND-RECORD FOR TALKING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 739,421, dated September 22, 1903.

Application filed August 8, 1900. Serial No. 26,275. (No model.)

To all whom it may concern:

Be it known that I, ELDRIDGE R. JOHNSON, a citizen of the United States, and a resident of the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Sound-Records for Talking-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improved sound-record, and particularly to flat records, such as are used on gramophones and other sound-reproducing machines.

The object of this invention is to produce a record having a serrated or ribbed under surface in order that it may bear against the turn-table or record-support of the motor with increased frictional contact and maintain its position on said record-support during the operation of the machine without the use of the usual clamping-nut, such as ordinarily used on machines of this character.

Heretofore it has been the custom to secure the flat record-disk to the turn-table by providing the upper end of the turn-table spindle with a screw-threaded boss adapted to pass through an aperture formed in the center of the record and in providing a flanged nut adapted to fit on the said screw-threaded boss and bear against the record, and thus hold it in position during the operation of the machine. My invention is designed for the purpose of doing away with the flanged nut and constructing the record so that its own frictional contact will hold it to the record-support or turn-table and prevent it from turning except when the turn-table revolves.

In the accompanying drawings, in which similar letters of reference are used to indicate similar parts, Figure 1 is a bottom plan view of the sound-record constructed in accordance with my invention. Fig. 2 is a sectional view showing the record mounted upon a turn-table. Fig. 3 is a detail section on the line 3 3 of Fig. 1.

In machines of the gramophone type the record is supported upon a circular disk, as A, which is mounted on a spindle B, the said spindle being suitably connected to and driven by a spring-motor. On the upper surface of the turn-table is provided a layer of baize or felt *a*, upon which the flat circular record rests.

In carrying out my invention I form a circular record-disk C, having the sound-waves recorded thereon in the usual manner on the upper surface of said disk. The under surface of the disk is provided with a smooth circular center, as D, having a central aperture E, passing therethrough, adapted when the record is in position to receive the boss *a*, which projects through the center of the turn-table A. Extending radially from the smooth circular portion B are a number of sharp-pointed ridges, as *c*, extending to the circumference of the said record-disk. These ribs are located quite close together, as illustrated in the drawings, and the lower edges of the same are adapted to bear against the baize or other covering provided on the upper surface of the turn-table A, and the weight of the record is sufficient to cause the said ribs to become slightly embedded in the cloth, felt, or other material, and thereby hold the said record in close frictional contact with the turn-table with a sufficient degree of firmness to prevent of its being moved independently of the turn-table during the engagement of the stylus-point with the record-groove in the operation of the machine. Owing to the radial arrangement of the ridges *c* the spaces between them and above the cloth will contain air, which will be carried around with the table and record when the same is rotated. The centrifugal force produced by this rotation will tend to expel the air at the periphery of the record and so create a partial vacuum between the record and the turn-table or the cloth thereon. This partial vacuum will greatly increase the frictional contact of the record with the table and so produce very firm contact between them.

I have found that a record constructed in accordance with the above description will adhere to the turn-table with a sufficient degree of firmness to hold the same thereto during the operation of the machine without any other means or any clamping devices.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

A sound-record for talking-machines comprising a flat disk having sound-waves recorded on one surface thereof, a central aperture provided in said disk for centering the same upon the record-support, a series of sharpened radial ribs provided on the under surface of said disk, a record-support, and a textile covering for said support adapted to contact with the ribs on the record, substantially as described.

In witness whereof I have hereunto set my hand this 3d day of August, A. D. 1900.

ELDRIDGE R. JOHNSON.

Witnesses:

JNO. T. CROSS,

LEWIS H. VAN DUSEN.