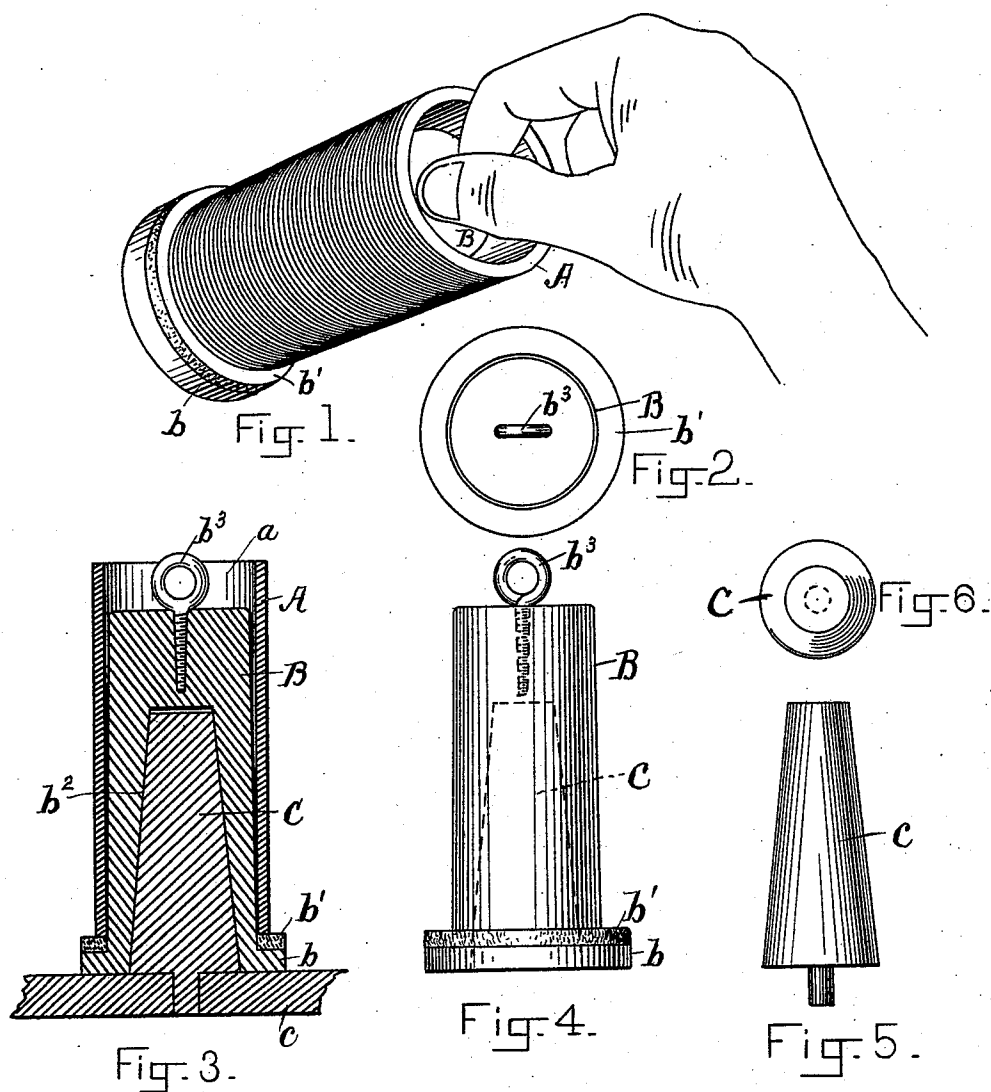


(No Model.)

L. B. GRAY.
HOLDER FOR PHONOGRAPH CYLINDERS.

No. 529,904.

Patented Nov. 27, 1894.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LAWRENCE B. GRAY, OF BOSTON, MASSACHUSETTS.

HOLDER FOR PHONOGRAPH-CYLINDERS.

SPECIFICATION forming part of Letters Patent No. 529,904, dated November 27, 1894.

Application filed January 12, 1894. Serial No. 496,628. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE B. GRAY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Holders for Phonograph-Cylinders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The record cylinders of phonographs, owing to the material of which they are made and the nature of their recording surfaces, must be very delicately and carefully handled. It is a very common thing in the operation of the phonograph to remove the record cylinder from the machine, place it in a drawer or other receptacle until needed, and then to replace it in the machine. The record cylinder is held while in the machine upon a part called a shaft or mandrel, which is of a size to fit the bore of the cylinder. In removing the cylinder from this mandrel, it must be taken hold of by the finger and thumb placed in the inside or cavity of the cylinder, and opened or spread apart to bear against the inside, and in no event should a finger or thumb be placed against the outer surface of the cylinder, either in removing it from the mandrel, or in placing it in its receptacle, or at any other time. It is desirable, therefore, to use this method of handling it as unfrequently as possible, and I have devised a holder which permits it to be handled with much less liability of breakage or injury to its outer surface.

The holder consists of a stud of a size to enter the bore or cavity of the record cylinder, and to extend through or very nearly through it, having at its base a flange upon which may be placed a washer of felt or similar material, and which acts as a foot or rest for the support of the cylinder. The opposite or upper end of the holder has in or extending from its center a short handle or thumb-piece, by which it may be grasped.

The holder is hollow, and is carried or supported by a pin or peg, the pins or pegs preferably being arranged to extend upward from the bottom of a drawer or case.

The invention will be more particularly described in connection with the drawings.

Figure 1 is a view in perspective of a record cylinder upon the holder, the holder being represented as grasped by means of its thumb-piece. Fig. 2 is a plan view of the holder, the record cylinder being removed from it. Fig. 3 is a vertical central section of the holder, its supporting pin, a portion of a drawer bottom, and the record cylinder. Fig. 4 is a view in elevation of the holder showing its holding pin by dotted outline. Fig. 5 is a view in elevation of the holding pin, and Fig. 6 is a view in plan thereof.

A is the record cylinder of the phonograph. It is cylindrical in shape, and has a bore or cavity *a* open at both ends.

B is the holder. Its stud is of a size to enter the cavity of the cylinder, and preferably to substantially fill the cavity from one end to or very nearly to the other end thereof, and it has at its lower end a flange *b*, upon which is mounted a felt or other washer *b'*, upon which one end of the record cylinder rests. The holder also has the pin-holding cavity or hole *b²* extending from its lower end or bottom upward, and at the upper end of the holder there is the grasping extension *b³*, which is represented in the drawings as a screw-eye screwed into the upper end of the holder; but any other form of grasping extension may be employed.

C is a pin carried by a drawer or case bottom *c*, or other holding device, and permanently secured to it, and upon which the holder B is placed. I prefer that this pin be of conical shape, and that the recess *b²* of the holder be of like shape, but of course, do not confine myself to this form.

The holder, or that portion of it in the bore of the cylinder is preferably shorter than the cylinder in order that there may be no projection above the upper edge of the cylinder, the cylinders being generally held in a case having a cover lined on its under surface with felt or other soft material, and closing upon the ends of the cylinders, and thereby holding them against the bottom of the case so as to prevent their having endwise movement in the case. It will be understood that it is very often necessary to transmit or move

the case with the cylinders in it from one place to another.

5 In lieu of providing the holder with a pin-holding cavity, the pin may be attached to the holder to extend downwardly from its base, and the hole for receiving the pin may be formed in the bottom of the case or drawer.

10 In removing and replacing the cylinder, the end of the holder may be placed against the mandrel of the machine, and the cylinder slid directly upon it by means of a thin blade pressed against the inner end of the cylinder to force it off the mandrel upon the holder, and the cylinder may be returned from the holder
15 to the mandrel in the same way; that is, the end of the holder may be held against the mandrel, and the cylinder removed from the holder to the mandrel. This method of placing and replacing the cylinder is used when
20 the stud is enough smaller than the cylinder to permit its smallest end to seat on the rest at the bottom of the holder. It will be understood that the cavity or bore of the cylinder is slightly tapering, and that the mandrel of
25 the phonograph is correspondingly tapering, and in some cases the holder is made tapering and of the size of the mandrel, and when so formed, it will be necessary to remove the cylinder from the holder by slipping the cylinder slightly off the stud, thus giving room for
30 the insertion of two fingers or the finger and thumb into the bore of the cylinder at the smaller end, and it is then entirely removed so held and placed upon the mandrel, and is
35 removed from the mandrel and placed upon the holder in the same way.

Whichever way is used for transferring the

cylinder from the mandrel to the holder, the holder acts as a secure means for supporting the cylinder when not in use, and for transferring it from the machine to its holding receptacle or pin, and vice versa. 40

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States— 45

1. A holder and transferrer for a phonograph record cylinder comprising a stud to enter the cavity of the cylinder having a rest at its lower end and a grasping device at its upper end, as and for the purposes described. 50

2. In a phonograph record cylinder holder and transferrer, a portable stud adapted to enter the bore of the cylinder having at its lower end a rest and provided with a cavity opening from its lower end to receive a holding pin. 55

3. A portable holder and transferrer for a phonograph record cylinder, having a stud to enter the cavity of the cylinder but of a length less than the length of the cylinder, and a foot or rest for the cylinder attached to the stud to be movable therewith, as and for the purposes described. 60

4. As a means for holding phonograph record cylinders, a pin C, and a cylinder holder having a foot or rest against which one end of the cylinder abuts, a grasping device and a hole to receive the holding pin, substantially as described. 65

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Witnesses:

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