A. B. KIDDER AND H. MILLER.

PHONOGRAPH RECORD CLEANER.

APPLICATION FILED JAN. 6, 1922.

1,435,645.

Patented Nov. 14, 1922.

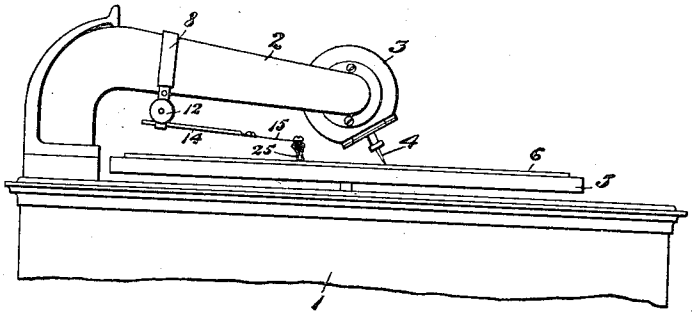


Fig. 1

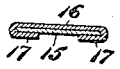


Fig. 5

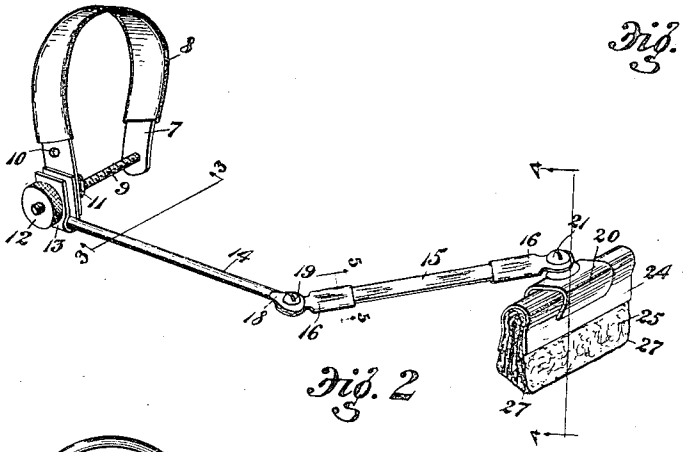


Fig. 2

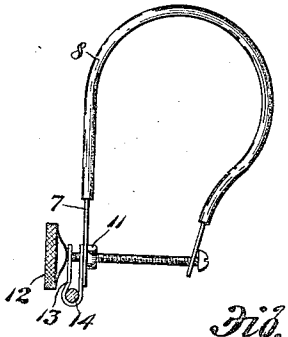


Fig. 3.

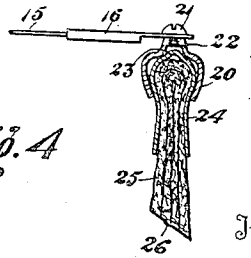


Fig. 4

Inventor

Arthur B. Kidder 2nd

Homer Miller

By Frease and Bond

Attorney

Patented Nov. 14, 1922. 1,435,645

UNITED STATES PATENT OFFICE.

ARTHUR B. KIDDER AND HOMER MILLER, OF CANTON, OHIO; SAID MILLER ASSIGNOR, BY MESNE ASSIGNMENTS, TO HENRY B. STOLZENBACH, OF CANTON, OHIO.

PHONOGRAPH-RECORD CLEANER.

Application filed January 6, 1922. Serial No. 527,361.

To all whom it may concern:

Be it known that we, ARTHUR B. KIDDER and HOMER MILLER, citizens of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented a new and useful Phonograph-Record Cleaner, of which the following is a specification.

This invention relates to phonograph record cleaners and more particularly to an attachment adapted to be carried upon the tone arm of the phonograph and provided with a cleaning pad arranged to travel upon the record ahead of the needle for brushing the record as it revolves and freeing the playing grooves therein of dust or other foreign matter before coming in contact with the needle.

The invention has as its objects to provide a device of this character which may be attached to the tone arm and adjusted to accommodate the same to any style of phonograph now in general use, provision being made for quickly and easily adjusting the device to properly position the cleaning pad upon the record.

Other objects are to provide a device of this character in which the cleaning pad is so constructed as to prevent singing or humming when the record is revolved and to provide means for easily and quickly removing the cleaning pad when it is necessary to replace the same.

Other objects will appear as the description proceeds, and in the drawings wherein a preferred embodiment of the invention is illustrated.

Figure 1 is a side elevation showing the attachment applied to a phonograph;

Fig. 2, a perspective view of the attachment;

Fig. 3, a section on the line 3—3, Fig. 2;

Fig. 4, a section on the line 4—4, Fig. 2; and

Fig. 5, a section on the line 5—5, Fig. 2.

Similar numerals refer to similar parts throughout the drawing.

Although the invention is illustrated in the drawing as applied to one particular form of phonograph, it is to be understood that the attachment is susceptible to use in connection with any ordinary form of phonograph now in use. A portion of the cabinet of the phonograph is illustrated at 1, the tone arm at 2, the reproducer at 3, the needle at 4, the turn-table at 5 and the record at 6, all of which parts may be of any usual and ordinary construction and in themselves form no part of the present invention.

The attachment includes a saddle or yoke 7, which may be formed of a resilient, flat, metal strip as shown in the drawings, and preferably provided with a tubular rubber covering 8. The free ends of the yoke are adjustably connected by a clamp screw 9 arranged to selectively engage apertures 10 in one leg of the yoke for adjusting the same to accommodate tone arms of various diameters.

An adjusting nut 11 is provided upon the inner side of the adjacent leg of the yoke, a thumb nut 12 being provided upon the outer end of the bolt for clamping the U-shaped clip 13 upon the rod 14 and at the same time clamping the adjacent leg of the yoke against the adjusting nut 11.

A spring arm 15 is provided at opposite ends with the clips 16, each of which is provided with the inturned edges 17 which receive the adjacent end portion of the spring arm. One of the clips 16 is connected to the flattened end 18 of the rod 14 as by the screw 19 by means of which the spring arm may be adjusted at any desired angle to the rod 14.

The other clip is similarly connected to the pad holder 20 by the screw 21, said pad holder being provided with the socket 22 which receives the projection 23 upon the metal channel 24 within which the pad 25 is clamped.

This pad is preferably formed of several layers of felt or similar material and its lower edge is beveled as shown at 26, for the purpose of preventing a singing or humming sound when the pad is held in contact with a revolving record. The lower corners of the pad 25 are preferably rounded as shown at 27, in order that the pad may be easily moved over the edge of a record when the tone arm is swung in either direction to remove a record or place a new one upon the turn-table.

As best shown in Fig. 1, the spring 15 will be under a slight tension during the operation of the phonograph, causing the pad 25 to rise and fall vertically to adjust itself to any unequalities in the record or reproducer mechanism, and causing the same to always bear with uniform pressure

upon the record in order to effectually clean the sound grooves without injuring the record or interfering with the working of the mechanism.

It will be seen that by the various adjustments provided, the attachment may be placed upon tone arms of any usual diameter and the rod 14 may be longitudinally adjusted, and the spring 15 and pad 25 pivotally moved and held in the adjusted position to assure the placing of the pad ahead of the needle and in the path thereof, regardless of the type of phonograph upon which the attachment is placed.

We claim:—

1. A record cleaning attachment including a yoke adapted to be clamped upon a tone arm, a clamping bolt carried by the yoke, a U-shaped member loosely mounted upon the clamping bolt, a rod extended through the U-shaped clamping member, a cleaning pad carried by the rod, and a nut upon the clamping bolt for simultaneously clamping the rod within the U-shaped member and the yoke upon the tone arm.

2. A record cleaning attachment including a yoke adapted to be clamped upon a tone arm, a U-shaped member loosely mounted upon the yoke, a rod extending through the U-shaped member, a cleaning pad carried by the rod and means for simultaneously clamping the rod within the U-shaped member and the yoke upon the tone arm.

In testimony that we claim the above, we have hereunto subscribed our names.

ARTHUR B. KIDDER.
HOMER MILLER.