May 30, 1950 F. G. MADERA 2,509,307

RECORD CLEANER

Filed Dec. 21, 1945

Fig. 2.

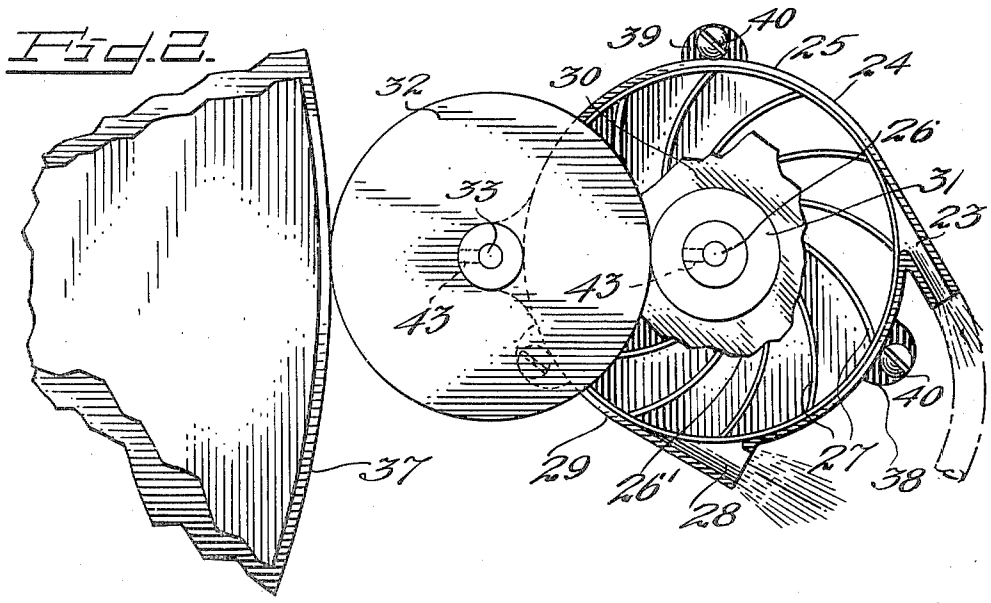
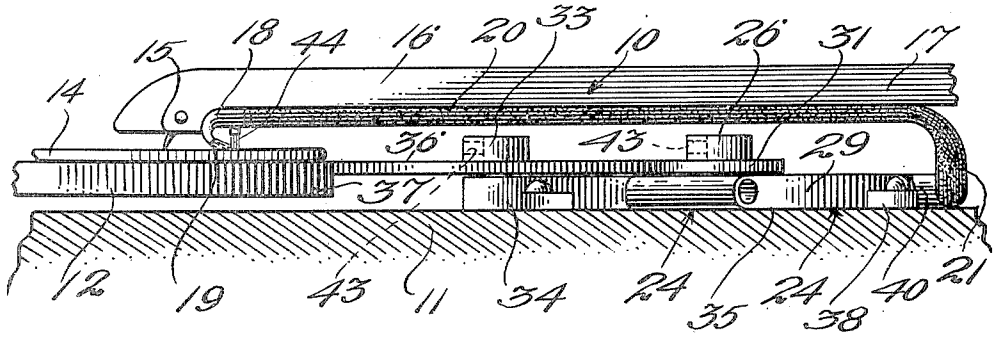


Fig. 1.



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RECORD CLEANER

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3 Claims. (Cl. 274—47)

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The invention as described herein, and illustrated in the accompanying drawings, consists of a phonograph record cleaner, an object of which is to provide an attachment for a phonograph by means of which a record being played thereon will be thoroughly cleaned of any dust or other debris thereon in advance of the needle.

Another object of the invention is to provide a pneumatic blast upon a record directly in advance of a needle.

A further object of this invention is to provide an attachment for a phonograph including a blower and a tube connected therewith and attached to the arm of the machine and having an exhaust at the diaphragm which exhaust is directed upon the face of the record and turned away from the needle whereby debris will be blown from the sound channels and away from the record.

Another object of the invention is to provide the combination of a wind and air brush for automatically cleaning a record as it is being played.

Other features and advantages will become more readily apparent from the following description and the accompanying illustrative drawings in which:

Figure 1 is an elevational view of a record cleaner shown in operative position, and

Figure 2 is a broken away plan view of the device.

While one embodiment of the invention is illustrated in the above referred to drawings, it is to be understood that they are merely for the purpose of illustration and that various changes in construction may be resorted to in the course of manufacture in order that the invention may be utilized to the best advantage according to circumstances which may arise, without in any way departing from the spirit and intention of the device, which is to be limited only in accordance with the appended claims. And while there is stated the primary field of utility of the invention it remains obvious that it may be employed in any other capacity wherein it may be found applicable.

In the accompanying drawings, and in the following specification, the same reference characters are used to designate the same parts and elements throughout and in which 10, refers to the invention in its entirety and 11, indicates a phonograph table upon which is mounted the usual turntable 12, upon which is shown seated a record 14, upon which the needle 15, of the diaphragm arm 16, is operatively seated.

Attached to the shell 17, of the arm 16, is an

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outlet tube 18, having a rearwardly inclined reduced port end 19. Connected to member 18, is a flexible air tube 20, which extends along and is secured to the arm 16, to adjacent the rear thereof and is then turned down as at 21, and its terminal 22, connected to the exhaust port 23, of a blower 24. The blower includes a casing 25, within which is mounted a shaft 26, and to the wall 30 to which are fixed a series of fan vanes 27, tangentially disposed and curving in the path of the inflow of air from the intake port 28, of the blower. I wish it understood at this point that while the intake port 28, is shown in the drawings as extending into the peripheral side 29, of the blower case, that I reserve the right to place the intake at any point on the blower which may later be found more suitable and practical for efficiency.

The shaft 26, of the blower extends above the top wall 30, of case 25, and has fixed thereon a friction wheel 31, which is in engagement with another friction wheel on disk 32, mounted upon a pintle 33, extending up from a boss 34, formed as an extension from the periphery of the bottom wall 35, of case 25. The periphery 36, of the latter disk is in frictional engagement with the periphery 37, of said turntable 12, whereby upon rotation thereof the disks or wheels 32, 31, and blower will be driven, causing the blower to force an air blast through the tube 20, and outlet 19, of nozzle 18, upon the record 14, whereby dust will be blown therefrom in advance of the travel of the needle 15. Bosses 38 and 39, also extend from the case 25, by means of which it may be secured to the table 11, with screws 40. The members 31 and 32, are secured to their respective supports 26 and 33, by means of collars 41 and 42, attached by set screws 43.

There is also provided a camel's hair or other suitable brush 44, detachably depending from the nozzle 18, and which is in engagement with the face of the record just in advance of the outlet 19, in order that the hairs of the brush may enter the spiral grooves of the record and detach any particles that may be inclined to adhere thereto, thus permitting the same to be blown off by the said air blast.

From the foregoing specification it will become apparent that the invention disclosed will adequately accomplish the functions for which it has been designed and in an economical manner and that its simplicity, accuracy and ease of operation are such as to provide a relatively inexpensive device considering what it will accomplish and that it will find an important place in

the art to which it appertains when once placed on the market.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Changes in shape, size and rearrangement of details and parts such as come within the purview of the invention claimed may be resorted to, in actual practice, if desired.

Having now described the invention that which is claimed to be new and desired to be procured by Letters Patent is:

1. In a sound-reproducing apparatus including a turntable spaced from a supporting table, and a swinging arm, the improvement which comprises an attachment for cleaning records including air-impelling means including a housing attached to the table, a flexible tube operatively connected with said air-impelling means and attached to said swinging arm for movement therewith, a brush secured to said tube for cleaning engagement with a record beneath said arm, a nozzle secured to said flexible tube for directing air to a recording adjacent said brush, and friction means disposed between said table and said arm engaging and driven by the turntable for actuating said air-impelling means.

2. In a sound-reproducing apparatus including a horizontal turntable spaced from a horizontal supporting table, and a horizontally swinging arm, the improvement which comprises an attachment for cleaning records disposed on the turntable including air-impelling means including a housing attached to the table beneath said arm, a flexible tube operatively connected with said air-impelling means and attached to said swinging arm for movement therewith, a brush secured to said tube for cleaning engagement with a

record, a nozzle secured to said flexible tube for directing air to a recording adjacent said brush while the turntable is in normal operation, and means disposed between said arm and said table engaging and driven by the turntable for actuating said air-impelling means including a chain of frictionally engaging and driven wheels.

3. In a sound-reproducing apparatus including a horizontal turntable spaced from a supporting table, and a swinging arm, the improvement which comprises an attachment for cleaning records including an air-impeller attached to the table below said arm, a flexible tube operatively connected with said impeller and attached to said swinging arm for movement therewith, a brush secured to said tube for cleaning engagement with a record, a nozzle secured to said flexible tube behind said brush for directing air to a recording adjacent said brush behind said brush, and means engaging and driven by the turntable for actuating said air impeller including a friction wheel attached to said impeller, a driven friction wheel engaging the peripheral edge of the turntable and frictionally engaging said first-mentioned wheel.

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