

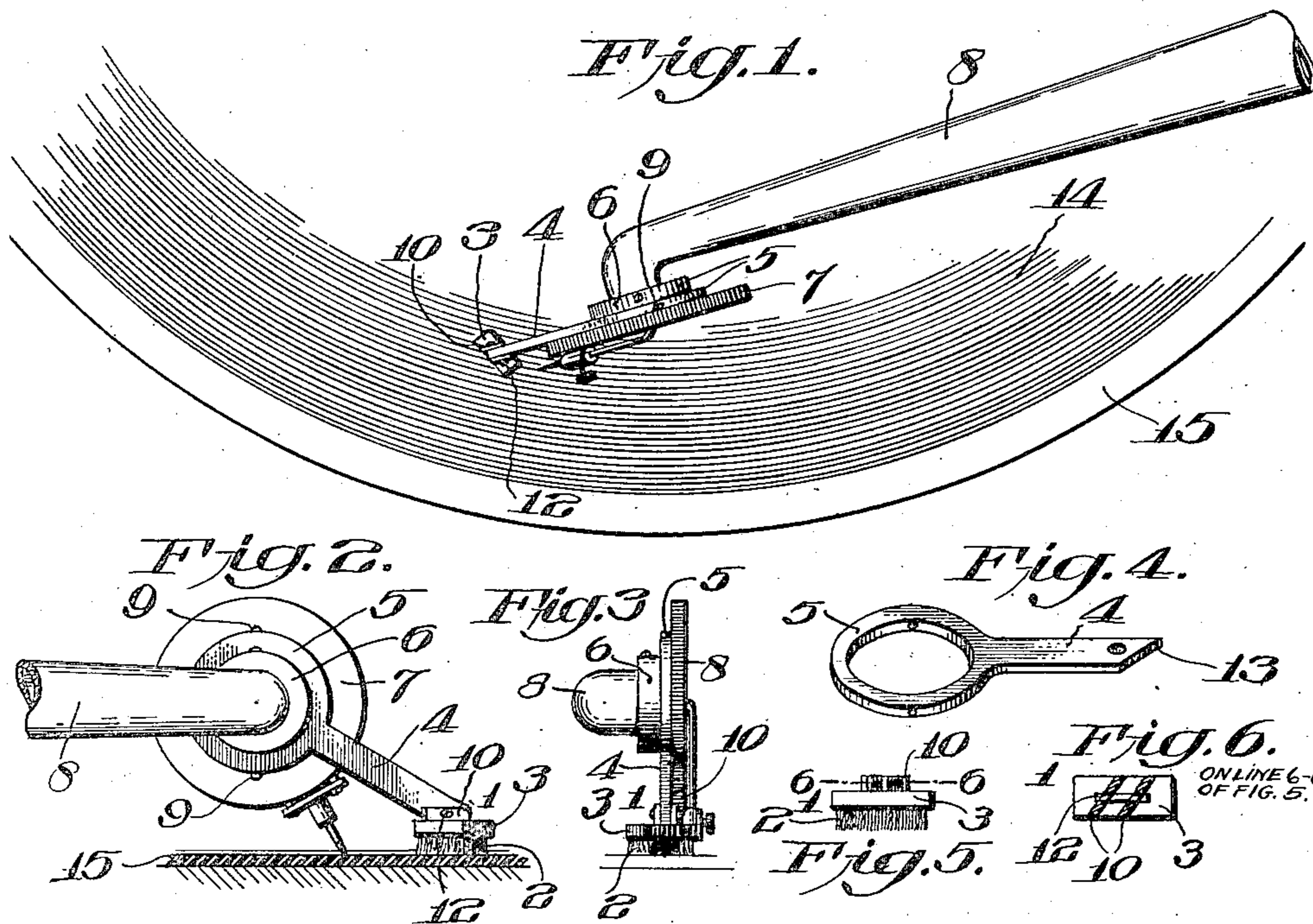
June 19, 1923.

1,459,549

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PHONOGRAPH RECORD CLEANER AND CLARIFIER

Filed Aug. 23, 1921



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## UNITED STATES PATENT OFFICE.

JOHN O'DONNELL, JR., OF PHILADELPHIA, PENNSYLVANIA.

PHONOGRAPH-RECORD CLEANER AND CLARIFIER.

Application filed August 23, 1921. Serial No. 494,544.

*To all whom it may concern:*

Be it known that I, JOHN O'DONNELL, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Phonograph-Record Cleaner and Clarifier, of which the following is a specification.

My invention consists of a novel construction of a phonograph record cleaner and clarifier, wherein I employ a brush or cleaning means for removing particles of dust from the sound grooves of a phonograph record positioned upon the latter in advance of the stylus thereof, said brush being so arranged as to clean the sound grooves of any particles of dust, while also clarifying the reproduction of the sound without in any way retarding or impeding the vibrations of the stylus, stylus holder or sound box diaphragm.

To the above ends my invention consists of a novel construction of a record cleaning brush and arm, to the forward end of which latter said brush is secured, the rear or upper end of said brush supporting arm being attached to a suitable portion of the sound box or its adjuncts at a point near its junction with the tone arm, whereby said brush is always retained in contact with the record at a point in advance of the stylus and the vibrations of the stylus and sound box diaphragm in the act of reproducing sounds will be in no way impaired, impeded or interfered with.

It further consists of other novel features of construction and advantage whereby a cleaner and clarifying device of the character above described is produced, all as will be fully set forth and pointed out in the claims.

For the purpose of illustrating my invention, I have shown in the accompanying drawings forms thereof which are at present preferred by me, since they will give in practice satisfactory and reliable results.

Figure 1 represents a plan view of a phonograph record cleaner and clarifier embodying my invention, showing the relative position the parts assume with respect to a record, when the latter is being played.

Figure 2 represents a rear elevation of Figure 1.

Figure 3 represents a front elevation of Figure 2.

Figure 4 represents a perspective view of

the brush supporting arm, seen in Figures 1 to 3, in detached position.

Figure 5 represents a side elevation of a brush detached from its holder.

Figure 6 represents a section on line 6—6 Figure 5.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:—

In carrying out my invention I attach or support the record cleaning brush 1 in respect to the stylus, sound box and tone arm in such a way that the vibrations of the stylus or sound box diaphragm which occur during the sound reproductions will not be impeded or retarded by the installation of my device, the various embodiments of which will now be described, reference being first had to Figures 1 to 6.

The brush 1 is composed of the bristles 2 and the back 3, to which is attached the arm 4 the latter having the eye or yoke 5, which fits over the collar or ring 6 on the sound box 7, which is carried by the tone arm 8, the latter and the sound box being of any conventional type. The yoke 5 is locked in position by the pins or screws 9 whose points are adapted to engage the surface of the collar 6 for holding and angularly adjusting purposes, of the arm 4 and the forward end of the arm 4 may be secured to the brush back 3 in any suitable manner as between the ears 10 of the brush back by a pin or the like 12, the forward end of said arm being bevelled, or mitered at 13 in Figure 4, so as to fit accurately against the top of the back 3. The ears 10 may be placed at an angle to the median line of the brush, so that the latter will be presented at an angle to the sound grooves 14 of the record 15, and thereby facilitate the cleaning operation as will be understood from Figure 1.

It will be seen that I utilize the collar 6 of the sound box as the means for holding the arm 4 on the latter, and likewise permitting the eye 5 to be turned around on said collar so as to adjust the angle of the arm so as to place the brush properly on the record. The brush is placed at an angle obliquely to the groove of the record, see Figure 1, so as to sweep the dust, grindings, etc., laterally and thus effectively from the groove towards the central ungrooved portion of the record.

The mitre 13 on the forward end of the

obliquely extending arm rests solidly on the back of the brush parallel therewith and so retains the bristles or brushing material parallel on the record. This admits also of the  
5 use of short bristles or brushing material. Then while the mitre of the arm contacts solidly with the back of the brush the lower portion of said arm about said mitre is fitted  
10 between the ears 10 on the back of the brush and secured thereto by the pin 12 which is passed through said ears and arm as has been stated, thus firmly connecting the brush with the arm and preventing twisting of  
15 either when the brush is in use on the rotating record and effectively wiping and cleansing the latter.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:—

20 1. In a phonograph record cleaner, a brush

carrier consisting of an obliquely arranged arm having at one end an eye to embrace the collar of a sound box, and its other end provided with a brush head, and means carried by said eye and engaging said collar  
25 to adjustably and rigidly hold the said arm thereon.

2. In a phonograph record cleaner, a brush carrier consisting of an obliquely arranged arm having one end mounted adjacent to a  
30 sound box, and its other end adapted to carry a brush head, said brush head being provided with diagonally disposed lugs between which the lower portion of said arm is engaged, and means for securing said por-  
35 tion to said lugs.

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Witnesses:

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