May 15, 1923. 1,455,504

D. E. ODOM

BRUSH

Filed Feb. 20, 1922

Fig. 1

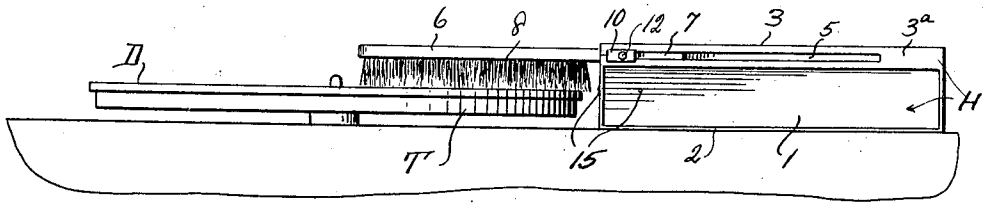


Fig. 2

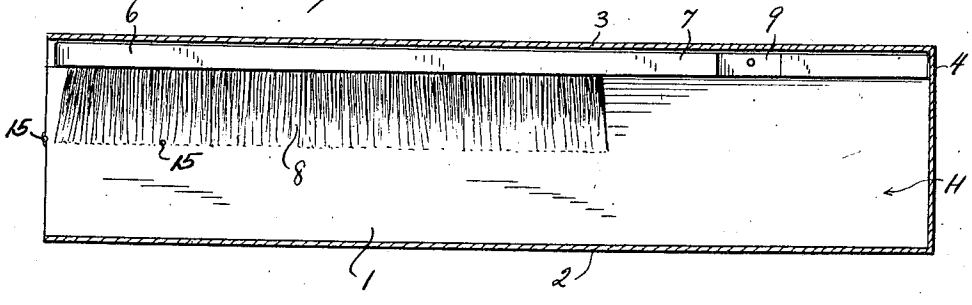


Fig. 4

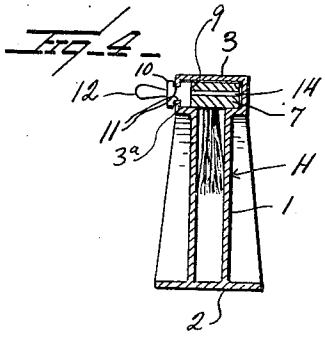
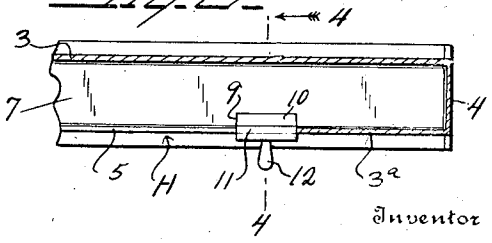


Fig. 3



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Patented May 15, 1923. 1,455,504

UNITED STATES PATENT OFFICE.

DANIEL E. ODOM, OF BENNETTSVILLE, SOUTH CAROLINA.

BRUSH.

Application filed February 20, 1922. Serial No. 537,963.

To all whom it may concern:

Be it known that I, DANIEL E. ODOM, a citizen of the United States, residing at Bennettsville, in the county of Marlboro and State of South Carolina, have invented certain new and useful Improvements in Brushes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in brushes and it is an object of the invention to provide a novel and improved brush particularly designed and adapted for use in the cleaning of phonographic records and more especially of a disc type.

Another object of the invention is to provide a novel and improved device of this general character comprising a brush head supported for sliding movement in opposite directions, the movement of the brush head in one direction positioning the same above and in contact with a record, the movement of the brush head in the opposite direction positioning the same to one side of the record, together with means operating upon movement of the brush head in one direction to cleanse the same.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved brush whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in elevation of a brush constructed in accordance with an embodiment of my invention, with the head extended into position to engage a phonographic record;

Figure 2 is an enlarged sectional view taken longitudinally through the device as herein disclosed with the brush head in retracted position;

Figure 3 is a fragmentary longitudinal sectional view taken through the device as illustrated in Figure 2; and

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 3.

As disclosed in the accompanying drawings, H denotes a housing which, when in applied position, is supported in relatively close proximity to the table T of a sound reproducing device and which table is adapted to have arranged thereon in a conventional manner a disc record D. The housing H is disposed substantially radially of the table T and is substantially I-shaped in cross section with its intermediate or web portion provided with the transversely spaced vertical walls 1 herein disclosed as integrally formed with the base strip or member 2.

The head or upper portion 3 of the housing H is tubular and substantially rectangular in form. The end portion of the head 3 remote from the table T is closed by the plate 4 which also closes the space between the plates 1 at the adjacent ends thereof.

A side wall 3^a is provided with an elongated slot 5 extending longitudinally thereof and from a point in close proximity to the open end of the housing along the major portion of said housing.

6 denotes a brush back continued by an extension or handle 7, said back 6 and handle 7 being of such cross sectional configuration as to snugly fit within the tubular head 3. Depending from the back 6 are the cleaning elements 8, such as hairs, bristles or the like, and which cleaning elements, when the back 6 is moved outwardly from within the housing H, has contact with a disc record D mounted upon the table T so that, as the table T and record D revolve, the cleaning elements 8 will serve to clean effectually the grooves of said record D so that the same may be maintained in the best possible condition to reproduce the sounds recorded thereon.

A side marginal portion of the handle 7 is provided with a recess 9 in which fits a portion of a guide block 10. The block 10 is elongated and is disposed through the slot 5, the upper and lower faces of said block 10 having disposed therealong the grooves 11 in which are received the marginal portions of the wall 3^a of the head 3 defining the slot 5. By this arrangement, the block 10 is supported for sliding movement in a fixed path of travel to either extend or retract the brush back 6 and the handle 7 associated therewith.

Extending outwardly from the block 10 is a handle 12 to facilitate the proper manipulation of the block 10. As herein disclosed, the handle 12 is affixed to the block 10 by an

extended shank 14 which is also disposed through the adjacent portion of the handle 7. By this means, the handle 7, together with the back 6, is permitted to have slight swinging movement with respect to and independently of the guide block 10 and which swinging movement is permitted to compensate for any inequalities which may occur in the horizontal path of travel of a disc record D being cleansed, so that the cleaning elements 8 will not impose undue resistance upon the record D to interfere with the requisite rotation of the table T.

When the cleaning elements are positioned within the housing H, it is to be noted that the back 6, together with the handle 7, serves to substantially close or seal the slot 5 so that ingress of dust or other foreign matter within the housing is substantially eliminated. The entrance of such foreign matter within the housing is further prevented by having the slot 5 positioned in the side wall 3^a of the head 3.

Extending across the housing H are the pins 15 or the like positioned for contact with the elements 8 so that the head 6 is moved out of or into the housing H, the pins 15 will serve to effect the cleaning of the elements or bristles 8. As particularly illustrated in Figure 2, it is noted that the pins 15 are located for contact with the outer or free end portions of the elements 8 whereby an effective cleaning thereof upon movement of the back 6 is assured.

From the foregoing description it is thought to be obvious that a brush constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A cleaning device for a sound reproducing record comprising a housing, a cleaning element movable into and out of the housing, said element when positioned outwardly of the housing being in position to engage the record to be cleaned, and means carried by the housing and coacting with the cleaning element when said element is moved to cleanse said cleaning element.

2. A cleaning device for a sound reproducing record comprising a housing, a cleaning element movable into and out of the housing, said element when positioned outwardly of the housing being in position to engage the record to be cleaned, and elements intersecting the housing at points spaced longitudinally thereof and coacting with the cleaning element when the same is moved into or out of the housing to clean said element.

3. In combination with a turn table for a disc record, a housing positioned to one side of said record substantially radially of the table, said housing being substantially I-shaped in cross section, the head of the housing being tubular, the intermediate portion of the housing having spaced walls, the space between said walls opening within the tubular head, an end of the housing being open, a cleaning element movable into and out of said housing, said cleaning element when extended overlying the record positioned upon the table and contacting with the reproducing surface of the record, said cleaning element including a head and handle slidably engaged within the tubular head of the housing, bristles carried by the head and extending between the spaced walls comprised in the intermediate portion of the housing when the cleaning element is moved within the housing, a wall of the tubular head of the housing being provided with a slot, an operating member extending outwardly of the head of the cleaning element and disposed through the slot in the head of the housing.

4. In combination with a turn table for a disc record, a housing positioned to one side of said record substantially radially of the table, said housing being substantially I-shaped in cross section, the head of the housing being tubular, the intermediate portion of the housing having spaced walls, the space between said walls opening within the tubular head, an end of the housing being open, a cleaning element movable into and out of said housing, said cleaning element when extended overlying the record positioned upon the table and contacting with the reproducing surface of the record, said cleaning element including a head and handle slidably engaged within the tubular head of the housing, bristles carried by the head and extending between the spaced walls comprised in the intermediate portion of the housing when the cleaning element is moved within the housing, a wall of the tubular head of the housing being provided with a slot, an operating member extending outwardly of the head of the cleaning element and disposed through the slot in the head of the housing, the bore of the tubular head being angular in cross section and the handle and head of the cleaning element snugly fitting therein whereby said cleaning element is held against rotary movement.

5. A cleaning device for disc phonograph records comprising a housing, a cleaning element movable into and out of said housing, said cleaning element when extended

overlying a record mounted upon the table and in contact with the reproducing surface thereof, said cleaning element including a head and handle, said housing being provided with a tubular head in which said head and handle of the cleaning element are slidably engaged, a wall of said tubular head of the housing being provided with a slot, an operating member for the cleaning element extending outwardly of the housing through the slot, the head and handle of said cleaning element when positioned within the housing serving to close the slot.

In testimony whereof I hereunto affix my signature.

DANIEL E. ODOM.