

No. 786,449.

PATENTED APR. 4, 1905.

H. H. KUHN.
TALKING MACHINE ATTACHMENT.
APPLICATION FILED SEPT. 19, 1904.

Fig. 1.

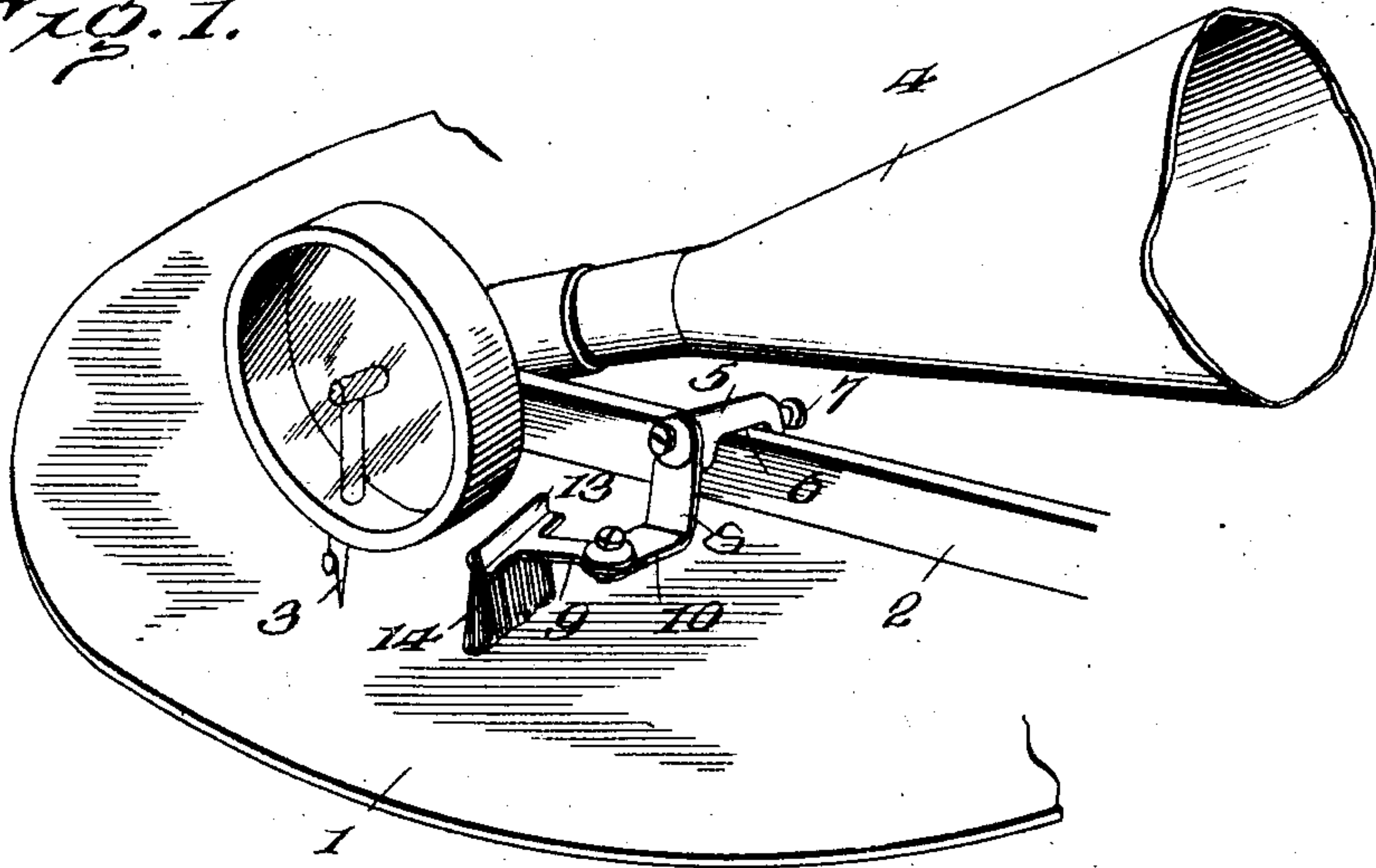


Fig. 2.

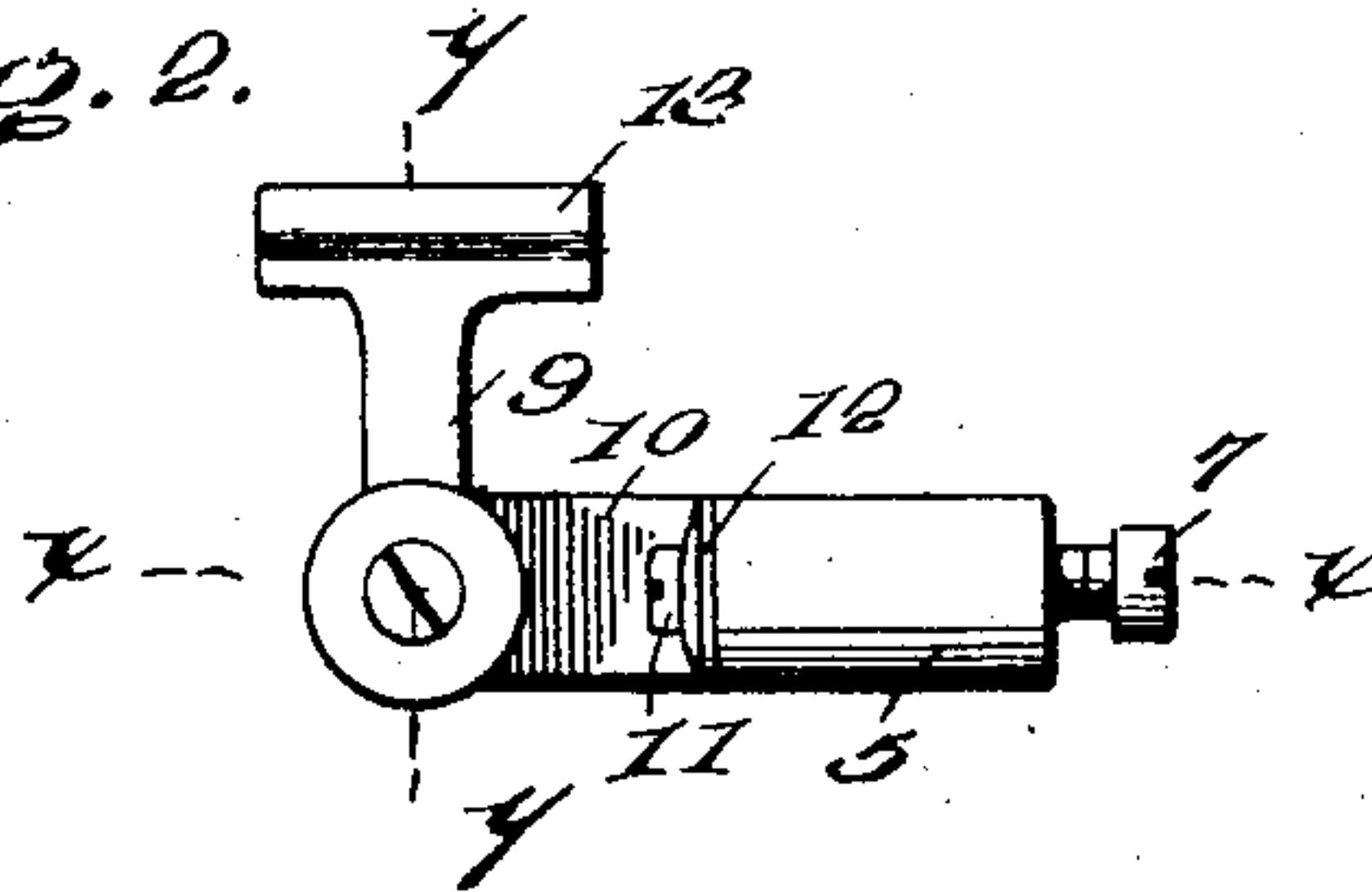


Fig. 3.

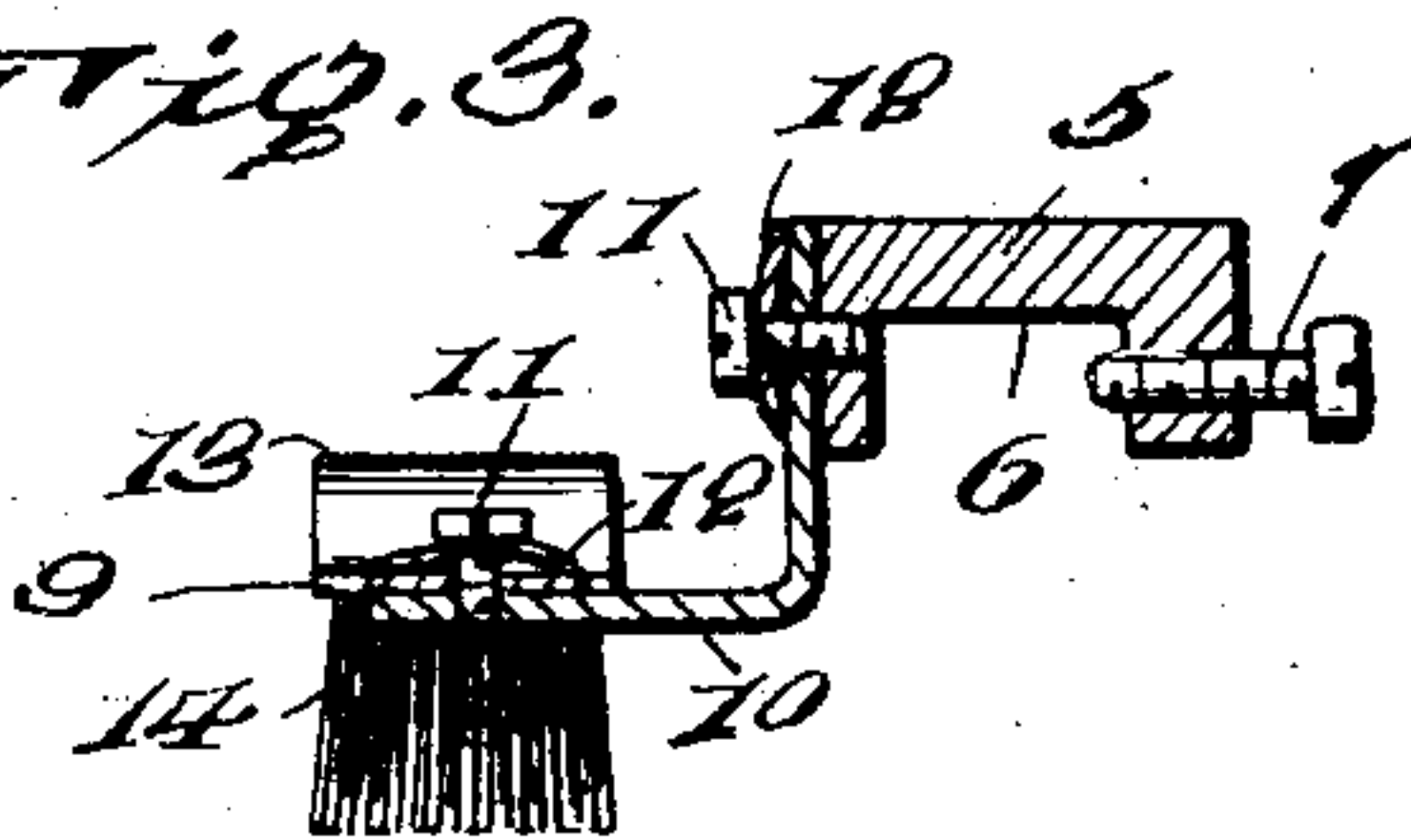
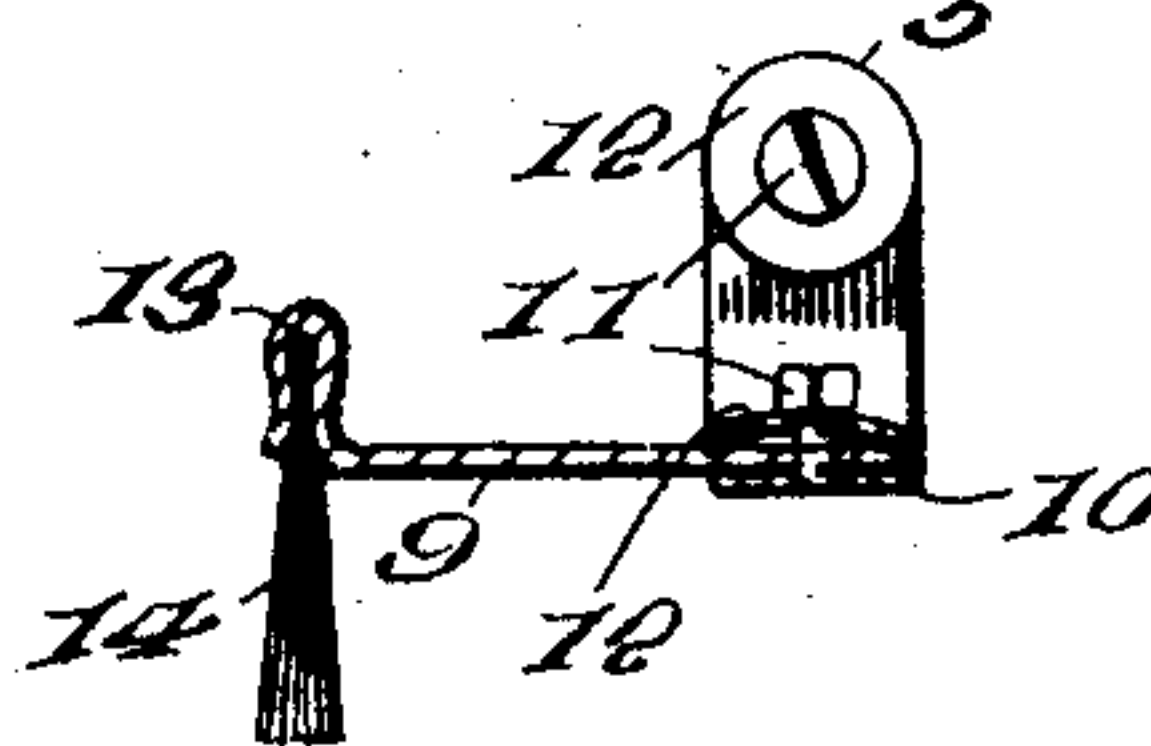


Fig. 4.



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TALKING-MACHINE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 786,449, dated April 4, 1905.

Application filed September 19, 1904. Serial No. 225,063.

To all whom it may concern:

Be it known that I, HARRY H. KUHN, a citizen of the United States, residing at Marshall, in the county of Clark and State of Illinois, have invented certain new and useful Improvements in Talking-Machine Attachments, of which the following is a specification.

This invention has relation to talking-machines, such as graphophones or the like, and embodies, essentially, a brush attachment adapted to traverse the surface of the record cylinder or disk used in connection with the stylus of the machine in the production of the sound.

The attachment is designed to be secured to the supporting-arm which carries the stylus or reproducer, and when in operative position the brush preferably travels slightly in rear of the stylus, passing over the entire surface of the cylinder or disk, as the case may be, keeping such surface perfectly clean and preventing the accumulation of dust or similar foreign matter, which might prevent proper working of the talking-machine in a manner readily apparent.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the same for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention applied to the talking-machine, the adjacent parts of the latter only being illustrated. Fig. 2 is a plan view of the attachment alone. Fig. 3 is a vertical sectional view taken on the line X X of Fig. 2. Fig. 4 is a view similar to Fig. 3, the section being taken about on the line Y Y of Fig. 2.

Corresponding and like parts are referred to in the description and indicated in all the views of the drawings by the same reference characters.

It will be understood that the attachment which comprises the invention may be used

upon any of the ordinary types of graphophones, that illustrated in the drawings being of the class in which the sound is reproduced from a revoluble disk 1, such as is commonly employed. The supporting-arm 2, which carries the reproducer or stylus 3 and the megaphone 4, is movably mounted in the usual manner in order that the stylus 3 may traverse the disk 1 in the operation of the machine. The attachment is secured to the supporting-arm 2 by means of a clamp member 5, the latter being bifurcated, as shown at 6, so as to readily receive the arm 2 in the portion 6 in securing the attachment upon said arm. A set-screw 7 is mounted in one end portion of the clamp member, and the inner end of this set-screw projects into the space formed by the bifurcated portion 6 of the clamp member, being adapted to engage the arm 2 positively in order to rigidly position the attachment thereon.

In addition to the clamp member 5 the attachment consists of a vertically-adjustable arm 8 and a horizontally-adjustable arm 9. The arm 9 is angularly adjustable relative to the arm 8 and is mounted upon a lateral extension 10 at the lower end of the said arm 8. The vertically-adjustable arm 8 is secured to the end of the clamp member opposite that having the set-screw 7, above described. Screws 11 or similar fastenings are used to secure the arm 8 to the part 5 and the arm 9 to the extension 10, and spring-washers 12 of cupped or concaved form in cross-section are interposed between the heads of the fastenings 11 and the members 9 and 8 adjacent. The washers 12 when the fastenings 11 are secured thereagainst frictionally bind against the parts 9 and 8, so that when said parts are adjusted by the pivotal movement thereof they will be held at any desired adjustment by the frictional contact of the parts 12. The arm 9 extends forwardly from the extension 10 of the arm 8, and the forward extremity of the arm 9 is widened, thus forming a head 13, carrying the brush 14. The brush material is secured in the head 13 in any suitable manner, and such material is preferably camel's hair or the like having requisite flexibility and softness in order to prevent injury to the sur-

face of the cylinder or the disk 1 over which the brush travels. Vertical attachment of the arm 8 enables this member to be so positioned as to cause the brush 14 to bear with greater or less pressure upon the disk 1, and the horizontal movement of the arm 9 is advantageous in that this arm may be fixed so as to bring a greater or less amount of brush material into contact with the part 1 as regards the width of the given track of the movement of the brush upon said part 1. In other words, angular attachment of the arm 9 will dispose the brush 14 with the front portion or side portion thereof directly in rear of the stylus 3, as may be found most desirable for the purposes of the invention.

The attachment may be made of metal and can be very cheaply manufactured.

Having thus described the invention, what is claimed as new is—

1. An attachment for talking-machines, comprising a clamp member adapted to be secured to the reproducer-supporting arm of the machine, a vertically-adjustable arm, a second arm angularly adjustable relative to the vertically-adjustable arm, and a brush carried by the last-mentioned arm.

2. An attachment for talking-machines, comprising clamping means, a vertically-ad-

justable arm carried by said clamping means, a horizontal arm adjustable relative to the vertically-adjustable arm, and a brush carried by the said horizontal arm.

3. An attachment for talking-machines, comprising a clamp device, a vertically-adjustable arm having a lateral extension, a horizontally-adjustable arm mounted upon the lateral extension aforesaid, and a brush carried by said horizontal arm.

4. An attachment for talking-machines, comprising a clamp member having a bifurcated portion to receive the supporting-arm of the reproducer of the machine, means for securing said clamp member in position, a vertically-adjustable arm pivoted to one end of the clamp member and having a lateral extension at its lower end, a horizontal arm pivoted to the lateral extension of the vertically-adjustable arm, and a brush carried by the horizontal arm and arranged to travel in rear of the reproducer of the machine.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY H. KUHN. [L. s.].

Witnesses:

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SIDANIA STEWART.