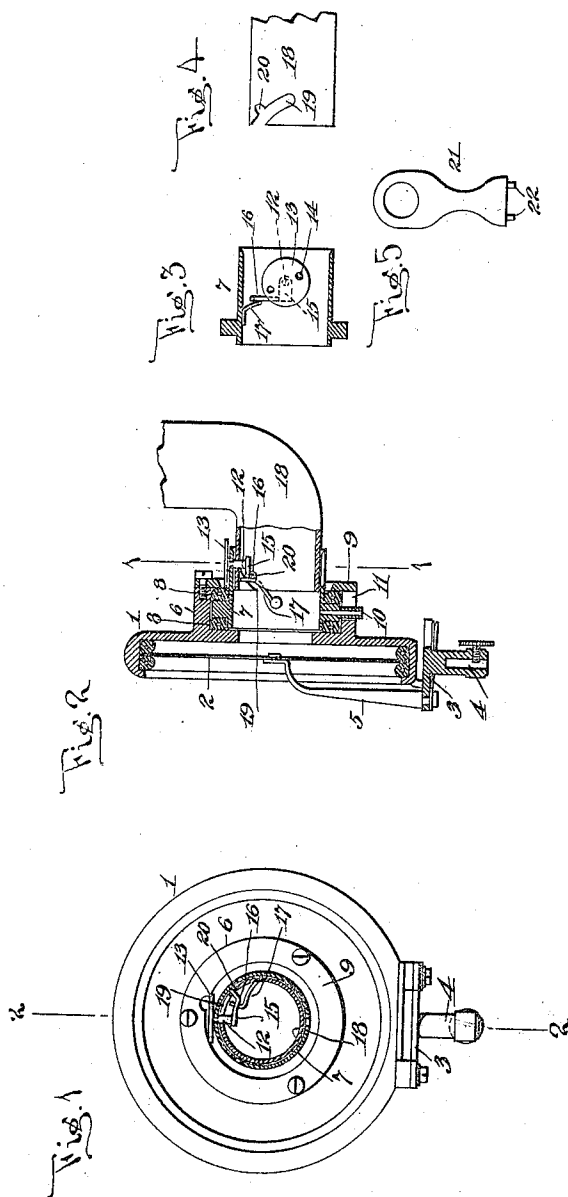


1,259,189

J. WOLFF.
LOCKING DEVICE FOR TALKING MACHINES.
APPLICATION FILED AUG. 19, 1916.

Patented Mar. 12, 1918



Inventor
Joseph Wolff
by Schuchter & Lotz
Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH WOLFF, OF BROOKLYN, NEW YORK, ASSIGNOR TO SONORA PHONOGRAPH CORPORATION, A CORPORATION OF NEW YORK.

LOCKING DEVICE FOR TALKING-MACHINES.

1,259,189.

Specification of Letters Patent. Patented Mar. 12, 1918.

Application filed August 19, 1916. Serial No. 115,900.

To all whom it may concern:

Be it known that I, JOSEPH WOLFF, a subject of the King of Great Britain and Ireland, and a resident of the borough of Brooklyn, county of Kings, State of New York, have invented a certain new and useful Improvement in Locking Devices for Talking-Machines, of which the following is a specification.

My invention relates to locks, and more particularly to a device for securing the reproducer or speaker of a talking machine to the tone-arm, and has for its objects to produce a device whereby the reproducer will be securely locked to the tone-arm, and cannot be removed by an unauthorized person.

A further object is to produce a device which will be simple and inexpensive to manufacture, and effective in operation.

I have illustrated my invention in the accompanying drawings, in which like reference characters designate corresponding parts in all of the several figures.

In the drawings,—

Figure 1 is a rear elevation of a reproducer partly in section, the section being taken on the line 1—1 of Fig. 2;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is a plan view of the lock with the thimble in section;

Fig. 4 is an elevation of the end of the tone-arm; and

Fig. 5 is an elevation of the key.

In the drawings, 1 designates the shell of a reproducer which carries therein a diaphragm 2. To one side of the shell is attached a stylus bar 3 which carries a socket 4, and which is connected to the center of the diaphragm by a bar 5. At the rear of the shell, and communicating therewith is a cylindrical boss 6. A thimble 7 is carried between cushions 8 in the boss and a ring 9 secured to the end of the boss retains the thimble in position. A pin 10 on the thimble projects into a longitudinal slot 11 in the boss, and prevents rotation of the thimble.

Rotatably mounted in the wall of the thimble is a spindle 12 which carries at one end, on the outside of the thimble, a disk 13, which is provided with two diametrically arranged perforations 14, and at the other end, inside the thimble, with a lever 15 which carries a finger 16. The finger projects off to one side of the spindle, and has

its end upturned at an angle so as to engage the bore of the thimble. A spring 17 is anchored in the thimble, and its free end engages the finger 16 and presses it toward the rear of the thimble.

The tone-arm 18 is provided at its outer or smaller end with an inclined slot 19, and one side of the slot has a notch 20 therein, near the open end of the slot.

I provide a key 21 having two projecting pins 22, which are spaced apart so as to engage the perforations 14 in the disk 13. The key is provided with an eye, by means of which it may be carried on a key ring.

The operation of my improved lock is as follows:

The reproducer is placed in position with the thimble in axial alinement with the end of the tone-arm and with the spindle 12 in alinement with the open end of slot 19. The thimble is now placed over the end of the tone-arm and moved forward with a rotary movement until the spindle is seated in the inner end of the slot. As the spindle progresses toward the inner end of the slot, the wall of the slot will engage the upturned end of the finger 16 and move it against the tension of the spring 17 until the finger reaches the notch 20. The speaker is now locked to the tone-arm, and cannot be removed without being unlocked.

To remove the speaker, the pins 22 of the key 21 are inserted in the perforations 14, and the disk 13 is rotated in the counter clockwise direction. The finger 16 will be swung out of the notch 20. The speaker will be rotated in the counter clockwise direction, and the engagement of the spindle 12 with the inclined slot will move the thimble off the end of the tone-arm.

In accordance with the provisions of the patent statute, I have described the principle of my invention together with the apparatus which I now consider to represent the best embodiment thereof, but I desire to have it understood that the apparatus shown is merely illustrative and that the invention can be carried out in other ways.

Having now described my invention, what I claim and desire to secure by Letters Patent is:

1. In a talking machine, the combination with a reproducer, a spindle carried by the reproducer, a finger carried by the spindle, of a tone-arm, there being a slot in the tone-

arm for engagement with the spindle, said tone-arm having a notch for engagement with the finger, and a key for moving the finger.

5. 2. In a talking machine, the combination with a reproducer, a spindle carried by the reproducer, a finger carried by the spindle, a spring engaging the finger, of a tone-arm, there being a slot in the tone-arm for engagement with the spindle, said tone-arm having a notch for engagement with the finger, and a key for moving the finger.

- 10 3. In a talking machine, the combination with a reproducer, a spindle carried by the reproducer, a finger carried by the spindle within the reproducer, a perforated disk carried by the spindle outside the reproducer, of a tone-arm having an inclined slot in its extremity, there being a notch in a wall of the slot, said slot engaging the spindle, said notch engaging the finger, and a key for engaging the perforations of the

disk, to rotate the spindle and release the finger from the notch.

4. In a talking machine, the combination 25 with a reproducer, a spindle carried by the reproducer, a finger carried by the spindle within the reproducer, a spring engaging the finger, a perforated disk carried by the spindle outside the reproducer, of a tone- 30 arm having an inclined slot in its extremity, there being a notch in a wall of the slot, said slot engaging the spindle, said notch engaging the finger, and a key for engaging the perforation of the disk to rotate the 35 spindle and release the finger from the notch.

This specification signed and witnessed this 17th day of August, 1916.

JOSEPH WOLFF.

Witnesses:

WM. VARIN,
C. WIDDER.