No. 757,159. PATENTED APR. 12, 1904.

L. P. VALIQUET.

FRICTION BRAKE.

APPLICATION FILED OCT. 1, 1903.

NO MODEL.

Fig. 1.

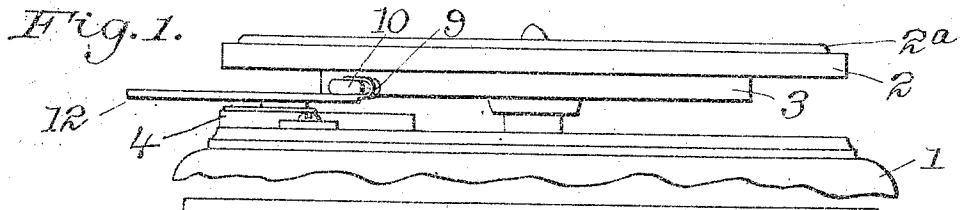
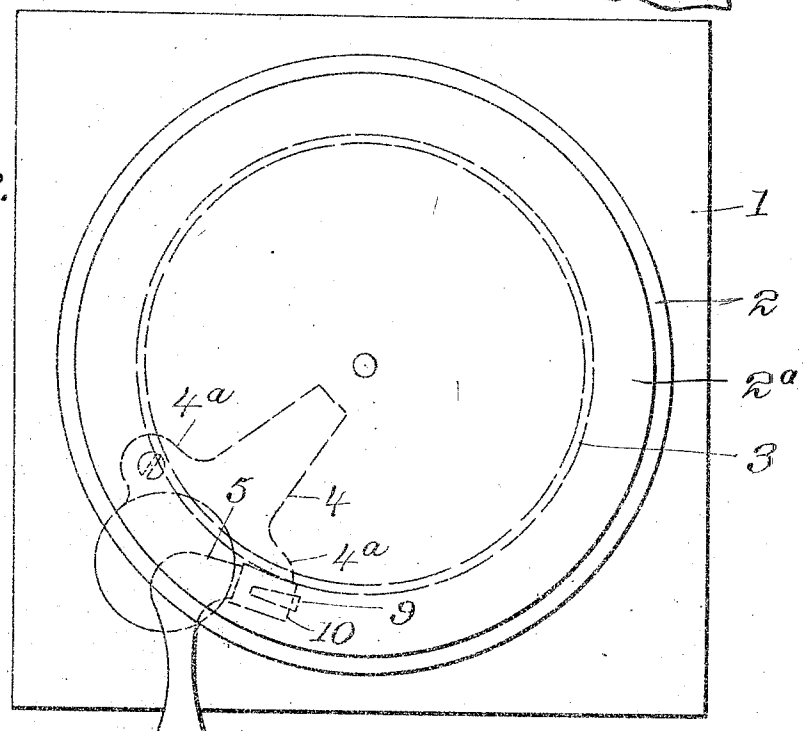


Fig. 2.



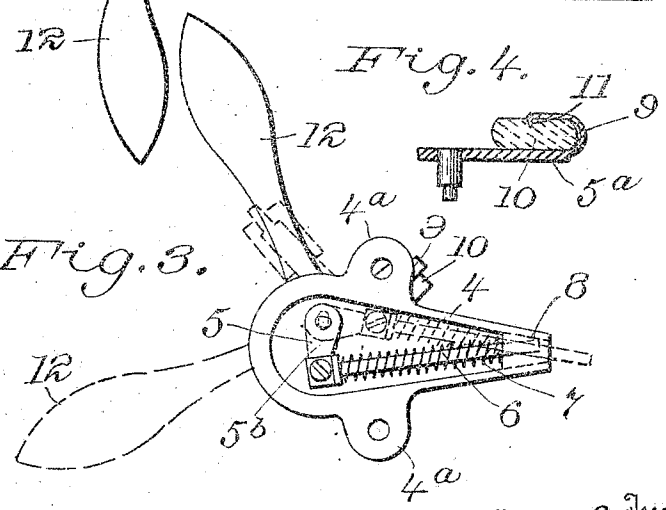


Fig. 3.

Fig. 4.

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No. 757,159. Patented April 12, 1904.

UNITED STATES PATENT OFFICE.

LOUIS P. VALIQUET, OF NEW YORK, N. Y., ASSIGNOR TO VICTOR TALKING MACHINE COMPANY, A CORPORATION OF NEW JERSEY.

FRICTION-BRAKE.

SPECIFICATION forming part of Letters Patent No. 757,159, dated April 12, 1904.

Application filed October 1, 1903. Serial No. 175,298. (No model.)

To all whom it may concern:

Be it known that I, LOUIS P. VALIQUET, a citizen of the United States of America, and a resident of the borough of Bronx, city, county, and State of New York, have invented certain new and useful Improvements in Friction-Brakes, of which the following is a specification.

My invention relates to friction-brakes in general, and more specifically consists of an improved form and arrangement of friction-brake for use in connection with the spring-motors of talking-machines.

In the manufacture of talking-machines it is desirable to produce a simple and effective friction-brake which may be readily held out of engagement when desired and which shall have a brake-pad of yielding material which may be readily removed or replaced, but which shall not become loose in operation. My invention accomplishes this result, and the preferred construction of the same is illustrated in the accompanying sheet of drawings, in which—

Figure 1 is a partial elevation showing the brake as applied to the turn-table of a talking-machine using disk-records. Fig. 2 is a plan view of the same. Fig. 3 is a reverse plan view of the brake mechanism in its containing-casing, and Fig. 4 is a detail sectional view showing the method of attaching the brake-pad to the brake-arm.

Throughout the drawings like reference-figures indicate like parts.

1 represents the motor-box of a talking-machine, on which is mounted the rotating table 2, carrying the disk-shaped sound-record 2^a.

3 is a circular rib on the under side of the table 2, located at some distance from the circumference thereof.

4 is the containing-case for the brake mechanism, usually made of cast metal, open at the bottom and fastened to the top of the box 1 by screws passing through the perforated lugs 4^a 4^a. This casing has a chamber of tapering shape, in the upper wall of which is journaled the bell-crank 5, one crank-arm, 5^a, being outside of the casing and the other crank-arm, 5^b, inside said casing. The pitman 6 is pivoted to the crank-arm 5^b at one end and has its other end loosely guided in the passage-way 8, formed in the small end of the casing 4. The spiral spring 7 surrounds the pitman and tends to force it toward the larger end of the casing 4.

The outer crank-arm 5^a has a flexible extension 9, which may be bent back and over the brake-pad 10, of leather or other suitable yielding material, thereby holding said pad in position on the crank-arm 5^a. To hold the brake-pad more securely, the flexible extension 9 may have a pointed tip 11, which may be driven down into the pad 10, as shown in Fig. 4.

The bell-crank 5 may be rotated by the handle 12 or other convenient means, and the brake mechanism is located under the table 2, so that barely any part of it, except the handle 12, extends beyond the outer edge of said table.

The operation of the apparatus is as follows: When the parts are in the position shown in full lines in Fig. 3 and in full and broken lines in Fig. 2, the spring 7 forces the pitman 6 toward the larger end of the casing 4, and the pitman tends to turn the bell-crank 5 toward the left, Fig. 3, which forces the brake-pad 10 against the rib 3 of the table 2 with force sufficient to prevent the rotation of the table. When the brake is to be disengaged, the handle 12 is thrown into the position shown in broken lines in Fig. 3, thereby withdrawing the pad 10 from engagement with the rib 3, and the crank-arm 5^b and pitman 6 passing the dead-point of the crank's revolution just before the pitman brings up against the side of the casing 4, as shown in broken lines in Fig. 3, and the parts remain at rest in that position, holding the brake disengaged. To apply the brake, a slight movement of the handle 12 is sufficient to carry the crank 5^b to the other side of the dead-point and permits the spring 7 to force the bell-crank around until the brake-pad again presses upon the rib 3.

The advantages of my invention comprise the powerful and certain action of the brake, its ease of manipulation, non-liability of the brake-pad to become detached while in oper-

ation, and convenient location of the brake mechanism under the table, where it is not liable to be damaged.

Of course various changes could be made in the details of construction illustrated without departing from the spirit and scope of my invention.

Having, therefore, described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The combination of the containing-casing, the bell-crank journaled in the wall thereof, the spring-actuated pitman pivoted to the crank-arm inside the casing and the brake-pad carried by the crank-arm outside of the casing, together with means for rotating the bell-crank, the casing being so shaped as to permit the inner crank and spring-pitman to pass slightly beyond the dead-point when the brake is in its position of disengagement.

2. The combination of the casing having a tapering chamber formed therein, the bell-crank journaled in the wall of the casing near one side at the larger end thereof, a pitman pivoted to the crank-arm inside the casing, and having its other end loosely guided in the smaller end of the casing, a spring forcing said pitman toward the larger end of the casing, and a brake-pad carried by the crank-arm outside of the casing.

3. The combination of the casing having a tapering chamber formed therein, the bell-crank journaled in the wall of the casing near one side at the larger end thereof, a pitman pivoted to the crank-arm inside the casing, and having its other end loosely guided in the smaller end of the casing, a spring forcing said pitman toward the larger end of the casing, and a brake-pad carried by the crank-arm outside of the casing, together with a handle attached to the bell-crank outside of the casing.

4. In a friction-brake, the combination of the crank-arm, the brake-pad carried thereon, and a flexible extension of said arm bent back around the pad.

5. In a friction-brake, the combination of the crank-arm, the brake-pad carried thereon, and a flexible extension of said arm bent back around the pad, said flexible extension being provided with a pointed tip driven into the brake-pad.

6. In a friction-brake mechanism for talking-machines, the combination of the rotating table provided with a circular rib on its under side located some distance from its circumference, the motor-box on which the table is mounted, the brake mechanism located on top of said box under the table, and coöperating with said circular rib, and the brake-operating handle projecting beyond said table.

Signed at New York, N. Y., this 21st day of September, 1903.

LOUIS P. VALIQUET.

Witnesses:
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