

No. 837,585.

PATENTED DEC. 4, 1906.

J. C. SCHLEICHER.
DAMPER FOR TALKING MACHINES.
APPLICATION FILED JAN. 6, 1906.

Fig. 1

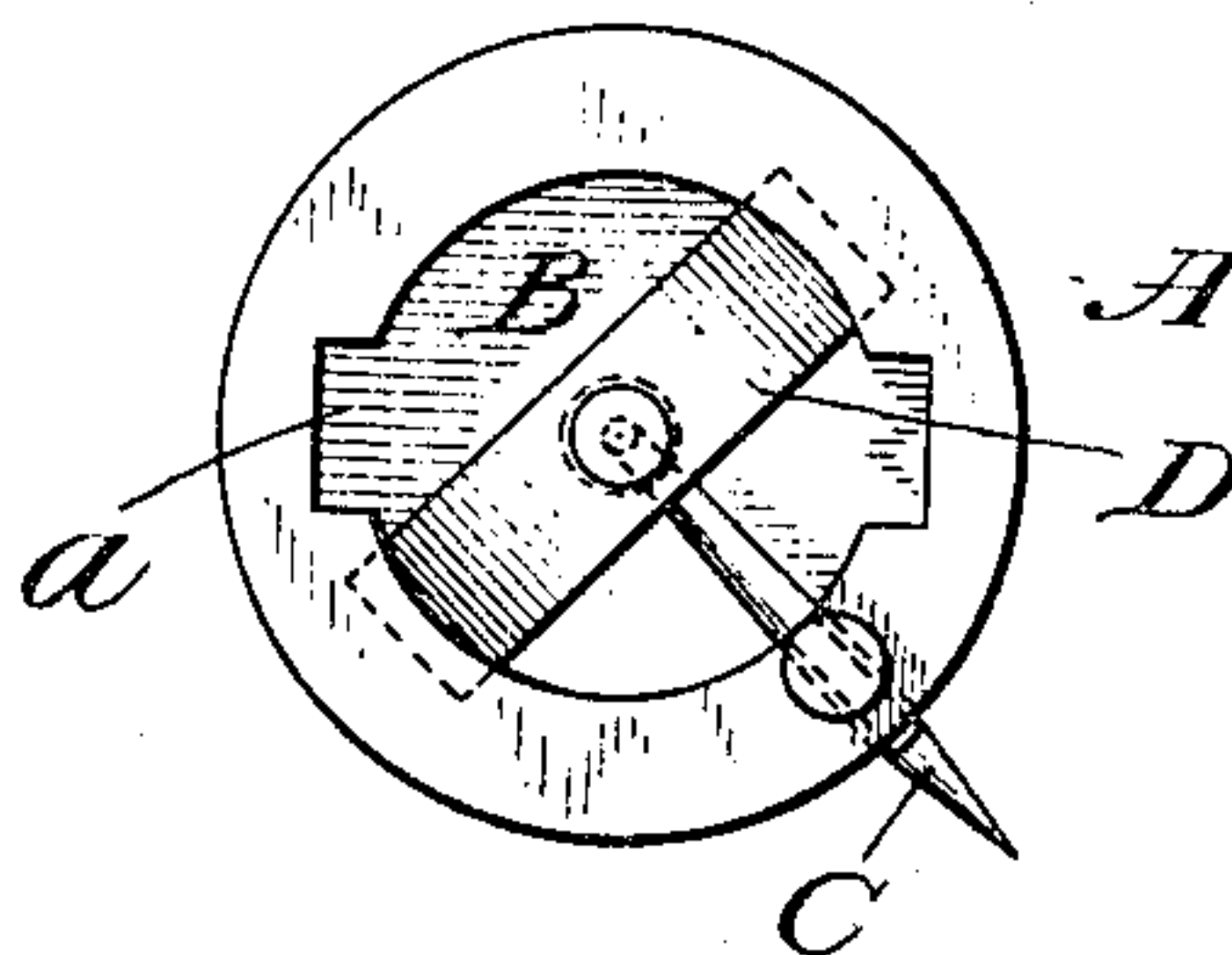


Fig. 2

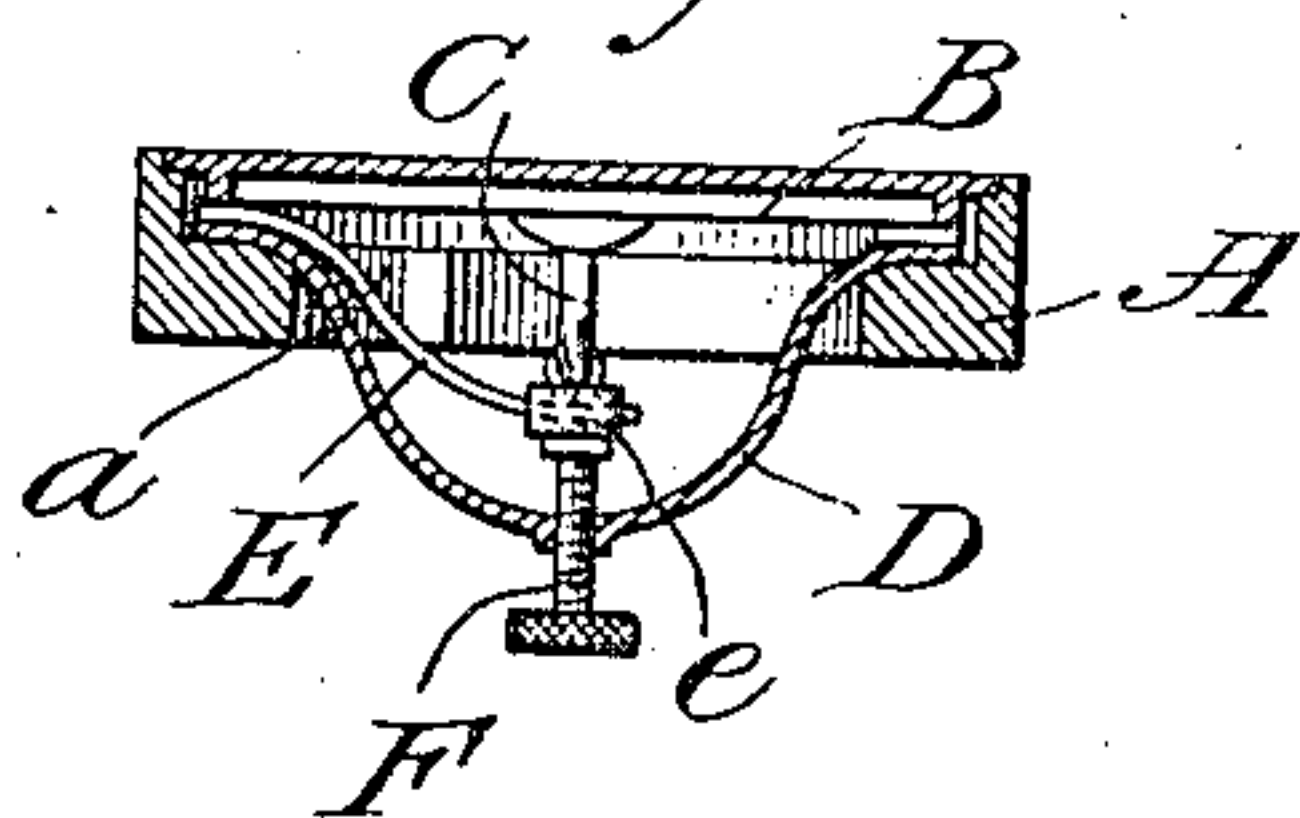


Fig. 3

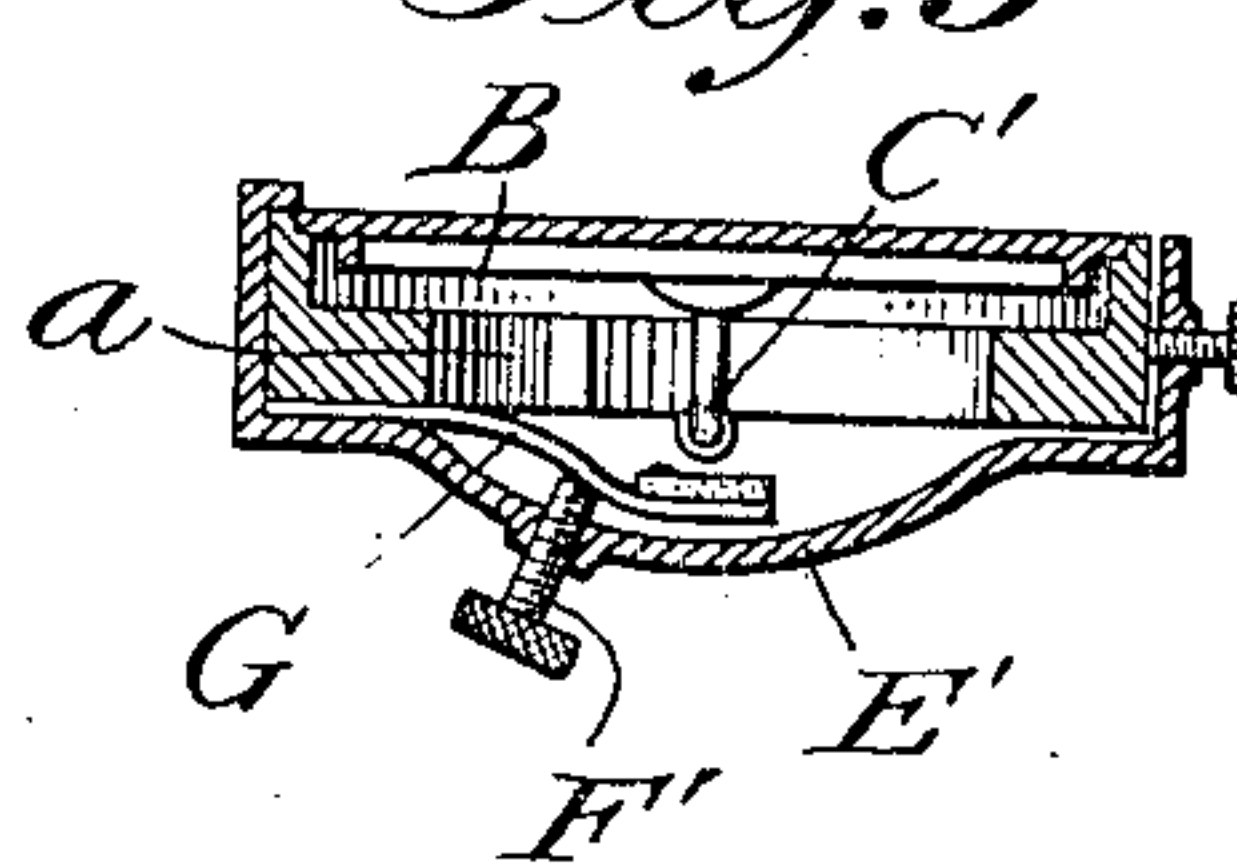
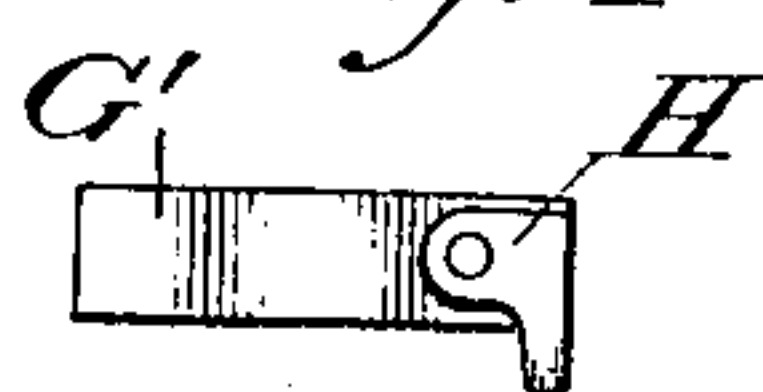


Fig. 4



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DAMPER FOR TALKING-MACHINES.

No. 837,585.

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Application filed January 6, 1906. Serial No. 294,964.

To all whom it may concern:

Be it known that I, JOHN C. SCHLEICHER, a citizen of the United States, and a resident of Mount Vernon, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Dampers for Talking-Machines, of which the following is a specification.

The subject of this invention is a reproducer-damper for talking-machines, and while disclosed herein as being associated with the type of machine wherein the record is in the form of a rotative horizontal disk said invention is also well adapted for machines using a cylinder-record.

It has been found in practice that the presence of dust or other foreign matter or abnormal irregularities on the record, particularly of the disk form, causes vibrations of the stylus-arm and the stylus mounted therein, which are magnified at the reproducing-diaphragm and produce harsh and discordant sounds. In addition it is desirable at times to modify and soften the sound thus reproduced.

My invention is designed to obviate the former defects in reproducers and also to equip the reproducer so that its tones and sounds shall be modified.

While the invention is disclosed in the accompanying drawings and set forth in the subsequent detailed description as being in the form of an attachment for reproducers, the improved device can be so embodied in connection with the reproducer as to constitute a permanent part thereof.

There are other important features connected with the invention, which, besides those alluded to, are clearly hereinafter explained.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view showing a familiar form of reproducer embodying my invention. Fig. 2 is a somewhat similar view, the damper being applied. Fig. 3 is a sectional view disclosing a modification of Figs. 1 and 2. Fig. 4 is a detail view of a modification, showing the spring-arm provided with a pivoted dog.

Referring more particularly to Figs. 1 and 2, A represents the ring or sleeve of the sounding-box, B the diaphragm thereof, C the stylus, and C' the stylus-arm in which the stylus is mounted, all of which parts are of the ordinary well-known construction, and therefore need not be further described. Under

some conditions the stylus-arm and its stylus are violently vibrated, and it is therefore the purpose of this invention to provide means, embodying a damper and means for adjusting it, whereby the vibrations of the stylus-arm and its stylus can be regulated. In the form shown in Figs. 1 and 2 the damper is illustrated as being in the form of an arched leaf-spring D, the free ends of which are adapted to be inserted in the notches of the ring or shell A of the sounding-box, whereby a lateral turn engages the ends in position. This leaf-spring D carries a spring member or arm E, which may or may not have a cushion e. A bit of tubular rubber will suffice for the purpose. The bow of the leaf-spring admits of an adjusting-screw F being tapped therethrough, so as to bear on the free end of the spring member or arm and force it toward the stylus-arm to restrict its vibrations and the vibrations of its stylus.

In Fig. 3 I have illustrated the construction in which the bow leaf-spring E' is indicated and the spring-adjusting screw F' is represented at one side of the spring-arm G. The diaphragm point or needle is referred to by C'. It will be observed in this construction, that the free end of the spring E equipped with the same damper material previously alluded to.

In Fig. 4 I have shown a construction in which a spring-arm G', similar to the arm E, on the free end of which a dog H is pivotally mounted, so as to adapt it to be turned between the end of said spring-arm and the stylus-arm and forced toward said stylus-arm by screwing in the adjusting-screw to thereby dampen the sound, or turned out of the way, so that the end of the spring-arm will only be interposed between said parts and forced toward the stylus-arm by screwing in the adjusting-screw.

I do not wish to be understood as limiting myself to the precise construction and arrangement of parts shown, but reserve the right to all modifications within the scope of my invention.

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

1. A dampening device for talking-machines, embodying an arched bridge, a spring-arm one end being free and a dog pivoted on the free end of said spring-arm, substantially as described.

2. A dampening device for talking-ma-

chines, embodying an arched bridge, a spring-arm one end being free, a dog pivoted on the free end of said spring-arm and means carried by said arched bridge for forcing said spring-arm inwardly, substantially as described.

3. A dampening device for talking-machines, embodying a spring-arm one end adapted to be secured to the sounding-box thereof and the other end being free and a dog pivoted on the free end of said spring-arm, substantially as described.

4. A dampening device for talking-machines, embodying a spring-arm one end adapted to be secured to the sounding-box thereof and the other end being free, a dog pivoted on the free end of said spring-arm, and means for forcing said spring-arm inwardly, substantially as described.

5. In a reproducer for talking-machines, the combination of the sounding-box and a dampening device embodying an arched bridge mounted on said sounding-box, a spring-arm mounted on said sounding-box one end being free and projecting over the stylus-arm, and a dog pivoted on the free end of said spring-arm, substantially as described.

6. In a reproducer for talking-machines, the combination of the sounding-box and a dampening device embodying an arched bridge mounted on said sounding-box, a spring-arm mounted on said sounding-box one end being free and projecting over the stylus-arm, a dog pivoted on the free end of said spring-arm, and means for forcing said spring-arm toward said stylus-arm, substantially as described.

7. In a reproducer for talking-machines, the combination of the sounding-box having notches and a dampening device embodying an arched bridge the ends adapted to be inserted into said notches and turned to engage said sounding-box to removably secure it thereon, a spring-arm removably secured on said sounding-box one end being free and projecting over the stylus-arm and means adjustably mounted in said arched bridge for forcing said spring toward the stylus-arm, substantially as described.

8. In a reproducer for talking-machines, the combination of the sounding-box having notches and a dampening device embodying an arched spring-bridge the ends adapted to

be inserted into said notches and turned to engage said sounding-box to removably secure it thereon, a spring-arm removably secured on said sounding-box one end being free and projecting over the stylus-arm and means adjustably mounted in said arched spring-bridge for forcing said spring toward the stylus-arm, substantially as described.

9. In a reproducer for talking-machines, the combination of the sounding-box having a notched flange and a dampening device embodying an arched bridge the ends adapted to be inserted into the notches in the flange of the sounding-box and turned to engage said flange to secure it, a spring-arm one end secured to the sounding-box and the free end projecting over the stylus-arm and a screw adjustably mounted in said bridge and adapted to force said spring-arm toward said stylus-arm, substantially as described.

10. In a reproducer for talking-machines, the combination of the sounding-box having a notched flange and a dampening device embodying an arched bridge the ends adapted to be inserted into the notches in the flange of the sounding-box and turned to engage said flange to secure it, a spring-arm one end secured to the sounding-box and the free end projecting over the stylus-arm a piece of dampening material on the free end of said spring-arm, and means for forcing said spring-arm toward said stylus-arm, substantially as described.

11. In a reproducer for talking-machines, the combination of the sounding-box having a notched flange and a dampening device embodying an arched bridge the ends adapted to be inserted into the notches in the flange of the sounding-box and turned to engage said flange to secure it, a spring-arm one end secured to the sounding-box and the free end projecting over the stylus-arm, a piece of dampening material pivoted on the free end of said spring-arm, and means for forcing said spring-arm toward said stylus-arm, substantially as described.

Signed at New York, in the county of New York and State of New York, this 29th day of December, A. D. 1905.

JOHN C. SCHLEICHER.

Witnesses:

A. B. BLACKWOOD,
CHAS. L. WOLF.