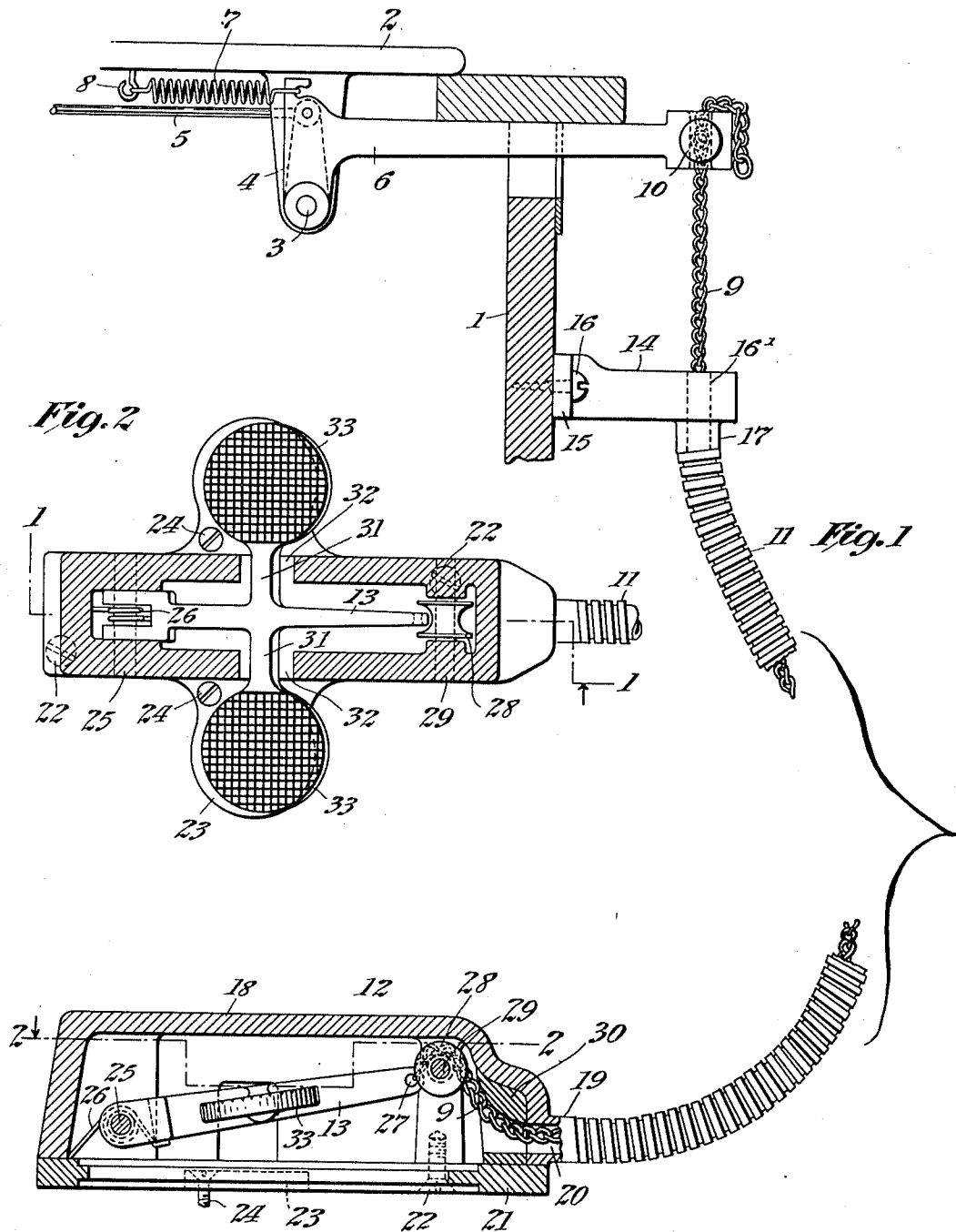


C. L. HIBBARD.
CONTROLLING DEVICE FOR PHONOGRAPHS.
APPLICATION FILED APR. 5, 1906.

970,223.

Patented Sept. 13, 1910.



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UNITED STATES PATENT OFFICE.

CHARLES L. HIBBARD, OF CHICAGO, ILLINOIS, ASSIGNOR TO NEW JERSEY PATENT COMPANY, OF WEST ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CONTROLLING DEVICE FOR PHONOGRAPHS.

970,223.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed April 5, 1906. Serial No. 310,138.

To all whom it may concern:

Be it known that I, CHARLES L. HIBBARD, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented certain new and useful Improvements in Controlling Devices for Phonographs, of which the following is a description.

My invention relates to devices adapted to be applied to phonographs or other talking machines for the purpose of controlling the starting and stopping of the rotating parts thereof, such as the mandrel and feed screw, and has been designed more particularly for phonographs of the type shown in Patent No. 742,485, granted October 18th, 1904, to Weber and Hibbard, wherein the starting and stopping is accomplished by an operating rod which moves a clutch member into engagement with a constantly driven co-operating clutch member when it is desired to drive the parts referred to, and my invention has for its object the provision of a device for controlling the operation of the phonograph from a distance which will comprise a long flexible mechanically operating, power transmitting connection extending between the phonograph and a foot lever or other operating member, whereby the operating member may be secured in any place which best suits the convenience of the person using the phonograph, for instance, the phonograph may be carried by a bracket screwed to the desk, and one end of the power transmitting connection applied thereto while the opposite end which carries the operating member may rest freely on the floor or may be secured thereto or to the desk. The device will also be neat in appearance; the moving parts will be protected, will be few in number, will operate readily and positively and will be unlikely to break or become deranged for an indefinite period of time.

With these ends in view my invention consists of the features hereinafter described and claimed.

Reference is hereby made to the accompanying drawings of which—

Figure 1 is an elevation partly in section, showing an apparatus constructed in accordance with my invention and applied to a phonograph of the type above specified, the sectional plane being designated by the line

1—1 of Fig. 2; Fig. 2 is a section on line 55 2—2 of Fig. 1.

Corresponding parts are designated by the same reference numerals in the respective views.

In the drawing, 1 is a portion of the cabinet which supports the top plate 2 of the phonograph, and the latter carries a rock shaft 3 having a crank 4, to which is connected the rod 5 for operating the clutch member which provides for the starting or stopping of the feed screw and mandrel as set forth in Patent No. 772,485, although if desired said rod may obviously be connected to other suitable starting and stopping devices.

Secured to the rock shaft 3 is a lever 6 which is normally held in the position shown by a spiral spring 7 connected at one end to the lever 6 and at the other end to a hook 8 carried by the top plate 2. A flexible tension member 9 such as a chain or wire is connected to the free end of the lever 6 by a set screw 10 and passes thence downward through a long flexible casing 11, one end of which is preferably secured to the cabinet 1 as shown and the other end secured to the support or body 12 which carries the operating lever 13 to which the tension member is connected. The chain 9 and tube 11 form a flexible power transmitting device between the said levers 6 and 13. The casing 11 is preferably composed of well known flexible but longitudinally rigid metal tubing one end of which is soldered to a bracket 14 having a lug or lugs through which the securing screw 16 passes, and an aperture 16' through which the chain 9 passes.

The lever support 12 comprises a hollow member 18 having a boss 19 to which the lower end of the tube 11 is soldered and through whose aperture 20 the chain 9 passes, and a base plate 21 secured to the member 18 by screws 22. The base 21 is provided with lateral extensions or flanges which are apertured for holding screws 24 by which the same may be secured to the floor, desk or other support. By making the support 12 of sufficient weight it may rest upon the floor without being secured thereto. The hollow member 18 is provided with a pivot pin 25 upon which the lever 13 is pivoted and normally held in the position

shown by a spring 26 coiled around the said pin and pressing against the said lever and the member 18 respectively. The free end of the lever 13 is formed with an eye 27 to which the end of the chain 9 is connected, the said chain passing over a roller 28 journaled on a pin 29 carried by the member 18. Between the roller 28 and aperture 20 is a bushing 30 of soft metal such as lead or solder, through which the chain 9 passes, the interior of said bushing being rounded as shown, whereby wear upon the chain is practically eliminated. The lever 13 is provided with a pair of laterally extending arms 31 which pass through openings 32 in the walls of the member 18, and the ends of the arms 31 are enlarged to form disks 33 the upper surfaces of which are roughened as shown, whereby the lever 13 may be readily operated from either side of the device by the foot.

In operating the device the operator merely presses with the foot, or hand if desired, upon either one of the disks 33, thereby moving the lever 13 downward and exerting tension upon the tension member 9; this member readily moves with respect to the flexible tube 11 and draws down the lever 6 thereby operating the rod 5 and starting the instrument. When it is desired to stop the same, the operator releases the lever 13 and the springs 7 and 26 restore the parts to their original positions.

Obviously the flexible tension member 9 may be replaced if desired by a flexible torsion member, such as a flexible shaft applied to the levers 6 and 13 respectively in such a way as to transmit the motion of the lever 13 to the lever 6.

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

1. As a new article of manufacture, the combination with a tension member, of the flexible guide 11 and body 12 having a soft metal bushing 30 through which the tension member passes, substantially as set forth.

2. As a new article of manufacture, the combination of the flexible guide 11, hollow body 12, and lever 13 pivoted within said body and having a pair of arms 31 extending laterally through opposite walls of said body, substantially as set forth.

3. As a new article of manufacture, the combination of a flexible guide, a hollow body to which said guide is connected, a lever pivoted within said body to oscillate in a vertical plane, and a tension member passing through said guide and connected to said lever, said lever having an annular

extension passing laterally through an opening in the wall of said body and adapted to be operated by foot pressure, substantially as set forth.

4. In a device of the character described, the combination of a flexible tension member, a spring for normally exerting tension upon one end thereof, a flexible guide, a body connected to one end of said guide, a vertically movable lever pivoted to said body and connected to one end of said tension member and a spring applied to said lever, said body being of sufficient weight and so shaped as to permit the lever to operate the tension member when the body rests upon the floor without being secured thereto, substantially as set forth.

5. In a device of the character described, the combination with a member to be operated, of means for operating the same from a distance, comprising a body, a movable operating member pivoted thereto, a long, flexible, mechanically operating, power transmitting connection between the two members capable of assuming and operating in practically any position of curvature without intermediate support, said body being of sufficient weight and so shaped as to permit the operating member to be moved so as to operate the power transmitting connection when the body rests upon the floor without being secured thereto whereby the operating member may be located at any desired point within the range of the said power transmitting connection, substantially as set forth.

6. In a device of the character described, the combination with a member to be operated, of means for operating the same from a distance, comprising a body, a movable operating member pivoted thereto, a long, flexible, mechanically operating, power transmitting connection between the two members, said connection consisting of a flexible tube or casing and a flexible member within said casing and connected at opposite ends to said members, said body being of sufficient weight and so shaped as to permit the operating member to be moved when the body rests upon the floor without being secured thereto whereby the operating member may be located at any desired point within the range of the said power transmitting connection, substantially as set forth.

This specification signed and witnessed this 29th day of March, 1906.

CHARLES L. HIBBARD.

Witnesses:

JOS. H. MERRITT,
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