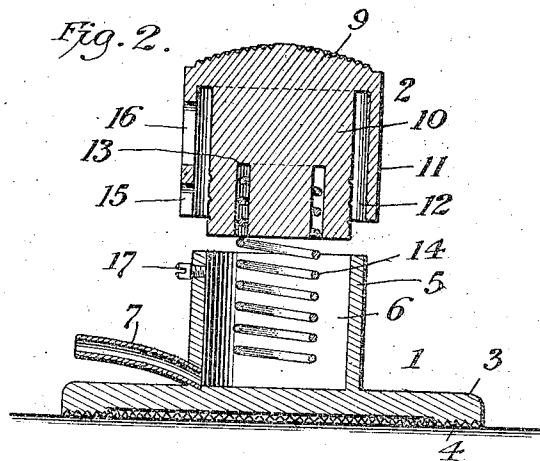
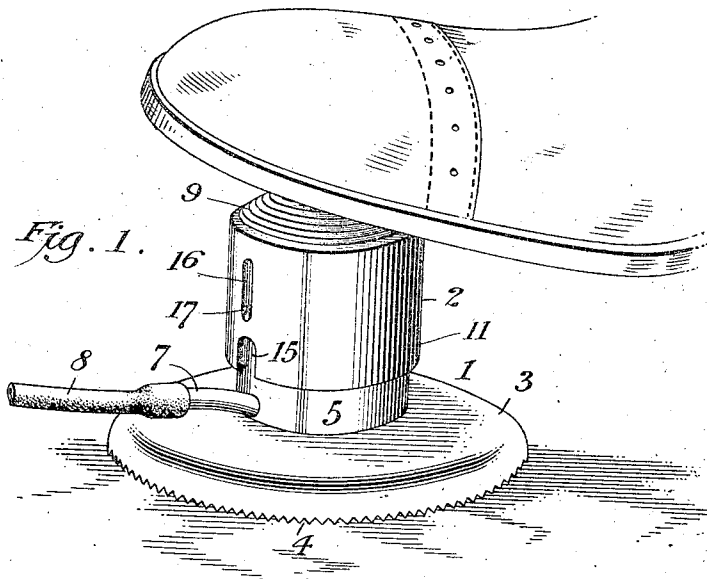


T. H. MACDONALD.
 FOOT CONTROL FOR GRAPHOPHONES.
 APPLICATION FILED DEC. 9, 1908.

934,450.

Patented Sept. 21, 1909.



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UNITED STATES PATENT OFFICE.

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FOOT CONTROL FOR GRAPHOPHONES.

934,450.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed December 9, 1908. Serial No. 486,678.

To all whom it may concern:

Be it known that I, THOMAS H. MACDONALD, a citizen of the United States of America, and a resident of Bridgeport, Fairfield county, Connecticut, have invented a new and useful Foot Control for Graphophones, which is fully set forth in the following specification.

This invention relates to graphophones or other talking-machines used for dictation purposes, in which the operator desires from time to time to stop the running of the machine for a shorter or longer period and then to start it up again, as when he pauses to think of the right word or phrase in his dictation. This starting and stopping must be brought about instantly, and by an almost unconscious or automatic movement of the operator, whose mind and hands will be busy with other matters. This starting and stopping is commonly accomplished by a pneumatically-operated start-and-stop device, which is itself operated or controlled by a bulb of soft rubber at the end of a rubber tubing connected with the start-and-stop device (like that used in snapping the shutter of a photograph camera). The bulb lies on the floor near the operator's foot, he compresses it to stop his machine, and releases it to start it again. But as a foot-control for dictation graphophones, this soft-rubber bulb has certain objections and defects. It is by no means a slightly appendage in an office; it is liable to roll slightly away out of the reach of the operator's foot, and he has to make a conscious effort of locating it; the rubber will deteriorate after use and lose its resiliency, so that it will not expand promptly or completely upon the removal of the operator's foot, whereby the graphophone is not started up promptly or at all; the bulb will also crack and break after some use, which will render it altogether worthless for the purpose.

The object of the present invention is to provide a substitute for this soft-rubber bulb.

The invention consists of a neat, compact, substantial and durable two-part metal device, which, while easily moved around as by a thrust of the foot, will nevertheless remain stationary wherever placed; a device which will also be stable in its position, so as not to be accidentally upset; one which is above all positive, efficient, and always re-

liable in operation; one simple to construct, not liable to get out of order, easy to assemble or disassemble if desired, and slightly in appearance; and finally the object of the invention is to provide a device which, while having all the advantages already pointed out, can, at the same time, be readily operated by the tip of the operator's foot, without requiring him to hold it in position with the other foot or by hand.

The invention will be best understood by reference to the annexed drawings which show a preferred embodiment thereof.

Figure 1 is a side elevation of the device in use; Fig. 2 is a vertical section showing the two parts separated but in position for assemblage.

1 is the stationary part, and 2 the movable part. The stationary part comprises the disk-like base 3 having the roughened portion 4 where it rests upon the floor, and the cylindrical wall 5 which provides the compression-chamber 6 that is entirely open at the top.

7 is a nipple communicating with the bottom of chamber 6 and adapted to receive the end of the rubber tube 8 that leads to the start-and-stop mechanism of the graphophone (not shown).

The movable part 2 has the (rounded, and preferably roughened) head 9 from the center of which depends the massive cylindrical block 10 that fits snugly within the chamber 6 as a piston, and the concentric cylindrical apron 11 which engages snugly around the outside of wall 5; the annular space 12 (between plug 10 and apron 11) serves to receive snugly the cylindrical wall 5 of the stationary member. Preferably on the inner and outer surfaces of wall 5 is a coating of vaseline or heavy oil. In the bottom face of the block or piston 10 is the annular groove or seat 13 (preferably concentric with block 10). A coiled expansion-spring 14 rests upon the floor of chamber 6, while its upper end is seated in groove 13. The lower part of apron 11 is cut away, as at 15, so as to straddle nipple 7 when pushed down.

16 is a longitudinal guide-groove in the apron 11, to co-act with a guide-screw 17 secured in wall 5.

To assemble the parts shown in Fig. 2, screw 17 is removed, the upper end of spring 14 is inserted into seat 13, and block 10 with the spring is introduced into casing 6; then

(after forcing them down) replace the screw 17 through slot 16. To disassemble, it is only necessary to take out the screw 17. It will be further observed that except for the spring 14 there are only two parts to the entire apparatus, viz: the stationary part 1 and the movable part 2.

The operation of the device is obvious.

In order to obtain the most satisfactory results the device should not be top-heavy. The preferred construction now being put out, as illustrated in the drawings, shows the height of the entire device when assembled to be considerably less than its base. The parts are substantial and massive, comparatively heavy, in fact; so that there is no risk of tipping over or sliding along the floor or slipping from underneath the foot when the operator undertakes to press on head 9.

Of course no valve is necessary in this device, wherein it differs from a pump.

The invention is not limited to the precise construction and arrangement of parts set forth, or to the precise proportions shown and described, since these are only shown for the sake of clearness and may be varied without departing from the spirit of my invention.

Having thus described my invention, I claim:

1. A foot-control for dictation graphophones, consisting of a stationary member having a wide base and a cylindrical cham-

ber with a nipple attached thereto, a movable member comprising a massive plug fitting as a piston within said chamber and an apron fitting outside the same, and a spring interposed between the two members.

2. A foot-control for dictation graphophones, consisting of a two-part device of less height than width, the stationary member thereof having a cylindrical casing with a nipple secured thereto, the movable member thereof carrying an apron surrounding the casing and also carrying a centrally-located massive plug fitting within said casing and having an annular groove in its bottom, and a helical spring seated in said groove and resting upon the floor of said chamber.

3. A foot-control for dictation graphophones, consisting of a comparatively low and broad stationary member carrying a guide-screw and a nipple, a comparatively low and broad and heavy movable member fitting therein and having a concentric apron surrounding the same, said apron having a cut-away portion to straddle said nipple and also a guide-slot engaging said screw, and a spring interposed between said members.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS H. MACDONALD.

Witnesses:

A. B. KEOUGH,
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