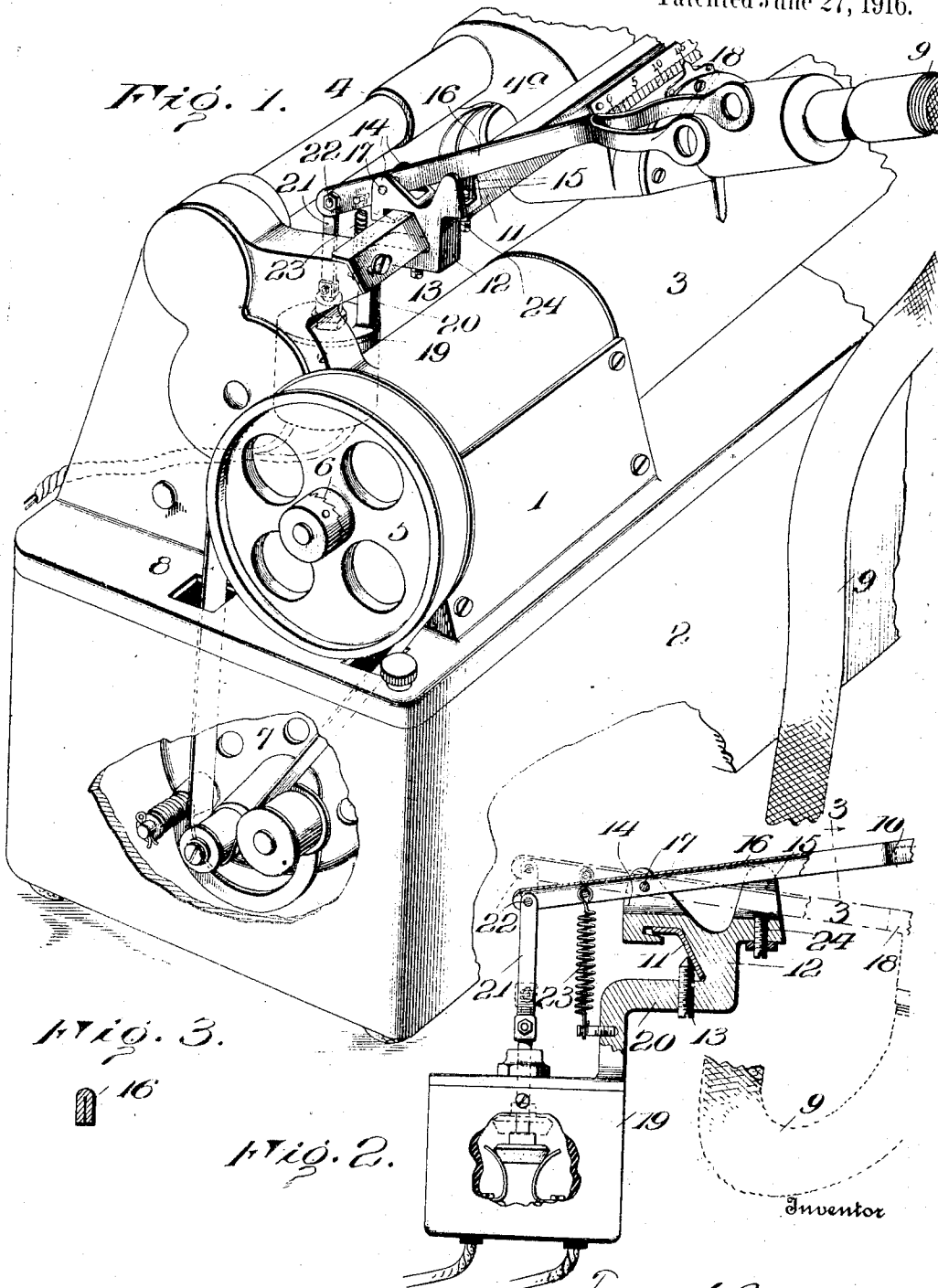


F. L. CAPPS.
TALKING MACHINE AND ATTACHMENT THEREFOR.
APPLICATION FILED JUNE 28, 1915.

1,188,728.

Patented June 27, 1916.



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TALKING-MACHINE AND ATTACHMENT THEREFOR.

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Specification of Letters Patent.

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Application filed June 28, 1915. Serial No. 36,800.

To all whom it may concern:

Be it known that I, FRANK L. CAPPS, a citizen of the United States of America, and a resident of Bridgeport, Connecticut, have invented a new and useful Improvement in Talking-Machines and Attachments Therefor, which invention is fully set forth in the following specification.

The invention relates particularly to talking machines adapted for office use in the dictating of correspondence and the like.

The object of the invention is to provide, in a machine of this class or as an attachment for such a machine, an automatically acting mechanism for starting and stopping the motor as the mouth-piece of the speaking tube is moved into or out of operative position.

In the accompanying drawing I have shown the embodiment of the invention which I now deem preferable, but it will be understood that this particular embodiment is presented merely for purposes of illustration and that the invention can be embodied in numerous other ways, the scope of the invention being indicated by the claims appended to this specification.

Of the drawing, Figure 1 is a perspective view showing some of the principal parts of a talking machine embodying my invention; Fig. 2 is a fragmentary detail view partly in section and partly in elevation showing the parts to which my invention especially relates; Fig. 3 is a detail sectional view taken along the line 3—3 of Fig. 2.

In the drawing I have illustrated a talking machine of the well known "dictaphone" type, but it is to be distinctly understood that the invention is not limited to machines of this particular sort. In the construction illustrated, 1 represents the main frame, the lower part of which is in the form of a flat plate which serves as a cover for the casing 2. Rotatably mounted in a bracket of the frame is the mandrel or record support 3. Also mounted on the main frame with its axis parallel to the axis of the mandrel support is a guide 4 for the combined recorder and reproducer 4^a. Preferably this guide 4 is hollow and has contained therein the feed screw for the recorder-reproducer, mounted and driven in the way well known to those skilled in

this art. As the specific construction of the recorder-reproducer and of the feeding mechanism therefor constitutes no part of my present invention, the details are not illustrated.

In the construction shown the mandrel is driven by means of a wheel 5 which is loose on the mandrel shaft but which can be operatively connected therewith by means of a jaw clutch 6. This clutch can be thrown into and out of operation in any of the well known ways, it being preferably opened and closed manually. For rotating the wheel 5 a suitable motor is provided, this motor in the preferred construction being an electric motor as indicated at 7 in the drawings. This motor is connected with the wheel 5 by a suitable power transmitting device such as the leather belt 8.

The motor is provided with a suitable device for starting and stopping it, and in the case of an electric motor, such as here shown, the starting and stopping device is a suitable switch.

Connected with the recorder-reproducer, preferably by means of a long flexible tube 9 is a mouth-piece 10 into which the dictator talks. This mouth-piece is movable vertically with respect to the recorder-reproducer and a suitable support for it is provided for holding it in a definite predetermined inoperative position. In accordance with my invention this support for the mouth-piece is mechanically connected with the start and stop mechanism for the motor, in this case the switch, so that the motor is started when the mouth-piece is removed from its support and stopped when the mouth-piece is returned to its support.

In the construction illustrated use is made of the horizontal bar 11 which is provided on "dictaphones" for carrying the scale which indicates the position of the recorder-reproducer. Secured to this bar is a bracket 12 having a recess with walls adapted to fit the top and side surfaces of the bar. Extending through the bottom of the bracket is a set screw 13 adapted to engage the inner side of the bar and lock the bracket in place.

The bracket 12 is provided with two pairs of ears 14—14 and 15—15 between which extends a hook lever 16. This hook lever is preferably formed of sheet metal doubled

upon itself throughout the major part of the lever, as indicated in Fig. 3. The lever 16 is pivoted at 17 to the two ears 14—14 and it extends between the ears 15—15 to be guided thereby. The lever 16 is provided at its front end with two forks 18—18 which are shaped to receive and hold the mouth-piece 10.

The start and stop device for the motor, which in the present construction is a switch, is indicated at 19. Preferably, for the sake of convenience and simplicity, this switch 19 is secured to an arm 20 formed integrally with the bracket 12. The switch can be of any suitable construction but I prefer a switch having a cylindrical casing and having a plunger working therein. Suitable contacts are carried by the casing and the plunger so that the circuit is completed when the plunger is in its lower position and broken when the plunger is in its upper position. Suitable electrical connections are provided between the switch 19 and the motor 7, these not being shown in detail as they will be obvious to those familiar with electrical constructions.

For operating the plunger of the switch 19, I provide a link 21 pivotally connected at its lower end to the plunger and pivotally connected at its upper end to the hook lever 16, as indicated at 22. Connected to the hook lever 16 is a spring 23 which tends to throw the rear end of the lever downward, thus throwing the switch into its circuit making position. Preferably this spring is a coil tension spring connected at its upper end to the rear part of the lever and at its lower end to the arm 20. The spring 23 is of such strength as to throw the switch into operative position when the weight of the mouth-piece and speaking tube is not carried by the forward end of the lever. But when the mouth-piece is carried by the forward hooked end of the lever, the tension of the spring 23 is overcome and the switch 19 is opened. Preferably there is provided a set screw which extends upward between the two ears 15—15 of the bracket and serves as a stop to limit the downward movement of the lever 16, thus preventing the transmission to the switch of the weight of the mouth-piece and speaking tube. This set screw is indicated in the drawing by 24 and it is preferably adjustable.

From the foregoing description, it will be understood that the user of the talking machine need give no attention to the motor. When he desires to dictate it is only necessary for him to pick up the speaking tube and start talking. When he has finished dictating, it is only necessary for him to hang up the mouth-piece and speaking tube and the motor automatically stops. It will of course be understood that the opera-

tor may, and preferably does, make use of the mechanical clutch 6 above referred to for stopping and starting the mandrel and the record independently of the motor when he desires to stop dictating for a moment only.

The switch and the pivoted mouth-piece supporting lever connected therewith, together with the supporting bracket and other parts illustrated in the drawing are well adapted to be made and sold independently of the other parts of the talking machine, and are capable of being applied to talking machines already in the hands of users and not originally provided with an automatic start and stop mechanism embodying my invention. My invention is therefore to be understood as covering such a mechanism whether manufactured and sold separately or whether manufactured and sold as a part of a complete talking machine.

What is claimed is:—

1. In a talking machine, the combination of a driving motor, a flexible speaking-tube provided with a mouth-piece, a bracket carried by the talking machine, a lever horizontally pivoted to the bracket and adapted to support the said mouth-piece, automatic means carried entirely by the bracket and serving to move the lever upward whenever the mouth-piece is removed, a motor start-and-stop device secured to the bracket independently of the lever below the point of attachment of the bracket to the talking machine, and a connection between the lever and the said device whereby the latter serves to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

2. In a talking machine, the combination of an electric driving motor, a flexible speaking-tube provided with a mouth-piece, a bracket carried by the talking machine, a lever horizontally pivoted to the bracket and adapted to support the said mouth-piece, a spring carried entirely by the bracket and serving to move the lever upward whenever the mouth-piece is removed, a switch in the circuit of the motor secured to the bracket independently of the lever below the point of attachment of the bracket to the talking machine, and a connection between the lever and the switch whereby the latter serves to close the motor circuit when the lever is moved upward by the said automatic means and to open the motor circuit when the lever is moved downwardly by the weight of the mouth-piece.

3. In a talking machine, the combination of a driving motor, a flexible speaking-tube provided with a mouth-piece, a bracket carried by the talking machine and having two

pairs of opposite upward projecting ears, a lever horizontally pivoted between its ends to the ears of one pair and movable between the ears of the other pair, the said lever being adapted at one end to support the said mouth-piece, automatic means carried entirely by the bracket and engaging the other end of the lever to move the first said end upward whenever the mouth-piece is removed, a motor start-and-stop device secured to the bracket independently of the lever, and a link connection between the last said end of the lever and the said device whereby the latter serves to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

4. In a talking machine, the combination of a driving motor, a flexible speaking-tube provided with a mouth-piece, a bracket carried by the talking machine and having two pairs of opposite upward projecting ears, a lever horizontally pivoted between its ends to the ears of one pair and movable between the ears of the other pair, the said lever being adapted at one end to support the said mouth-piece, an adjustable screw extending upward through the bracket between the second pair of ears and serving as a stop for the lever, automatic means carried entirely by the bracket and engaging the other end of the lever to move the first said end upward whenever the mouth-piece is removed, a motor start-and-stop device secured to the bracket independently of the lever, and a link connection between the last said end of the lever and the said device whereby the latter serves to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

5. In a talking machine, the combination of a driving motor, a record support driven by the motor, a sound-box movable across a record on the support, a bar provided with a scale for indicating the position of the sound-box, a mouth-piece flexibly connected with the sound-box, a bracket having a recess adapted to receive the said scale bar, means for clamping the bracket to the bar, a support on the bracket for the mouth-piece, a start-and-stop device on the bracket connected with the motor, and a connection between the said device and the mouth-piece support whereby the former serves to start and stop the motor when the mouth-piece is respectively removed from and placed upon the support.

6. In a talking machine, the combination of a driving motor, a record support driven by the motor, a sound-box movable across a record on the support, a bar provided with a scale for indicating the position of the

sound-box, a mouth-piece flexibly connected with the sound-box, a bracket having a recess adapted to receive the said scale bar, means for clamping the bracket to the bar, a lever horizontally pivoted to the bracket and adapted at its vertically movable end to support the mouth-piece, automatic means for moving the said end upward when the mouth-piece is removed, a start-and-stop device on the bracket connected with the motor, and a connection between the said device and the said lever whereby the former serves to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

7. An automatic start-and-stop mechanism for a talking machine having a horizontal scale bar, comprising in combination a bracket having a recess adapted to receive the scale bar of the talking machine, means for clamping the bracket to the bar, a support on the bracket for the mouth-piece of the talking machine, a start-and-stop device on the bracket adapted to be connected with the motor of the talking machine, and a connection between the said device and the mouth-piece support whereby the former serves when connected to the motor to start and stop the motor when the mouth-piece is respectively removed from and placed upon the support.

8. An automatic start-and-stop mechanism for a talking machine having a horizontal scale bar, comprising in combination a bracket having a recess adapted to receive the scale bar of the talking machine, means for clamping the bracket to the bar, a lever horizontally pivoted to the bracket, and adapted at its vertically movable end to support the mouth-piece of the talking machine, automatic means for moving the said end upward when the mouth-piece is removed, a start-and-stop device on the bracket adapted to be connected with the motor of the talking machine, and a connection between the said device and the lever whereby the former serves when connected to the motor to start the motor when the lever is moved upward by the said means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

9. An automatic start-and-stop mechanism for a talking machine, comprising in combination a bracket adapted to be detachably attached to the talking machine, a lever horizontally pivoted to the bracket and adapted to support the mouth-piece of the talking machine, automatic means carried entirely by the bracket and serving to move the lever upward whenever the mouth-piece is removed, a start-and-stop device secured to the bracket independently of the lever below the point of attachment of the bracket

to the talking machine, the said device being adapted to be connected to the motor of the talking machine, and a connection between the lever and the said device whereby the latter when connected to the motor serves to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

10. An automatic start-and-stop mechanism for an electrically driven talking machine, comprising in combination a bracket adapted to be detachably attached to the talking machine, a lever horizontally pivoted to the bracket and adapted to support the mouth-piece of the talking machine, a spring carried entirely by the bracket and serving to move the lever upward whenever the mouth-piece is removed, a switch connectible into the circuit of the motor of the talking machine and secured to the bracket independently of the lever below the point of attachment of the bracket to the talking machine, and a connection between the lever and the switch whereby the latter serves when connected into the motor circuit to close the circuit when the lever is moved upward by the said automatic means and to open the circuit when the lever is moved downward by the weight of the mouth-piece.

11. An automatic start-and-stop mechanism for a talking machine, comprising in combination a bracket adapted to be detachably attached to the talking machine and having two pairs of opposite upward projecting ears, a lever horizontally pivoted between its ends to the ears of one pair and movable between the ears of the other pair, the said lever being adapted at one end to support the mouth-piece of the talking machine, automatic means carried entirely by the bracket and engaging the other end of the lever to move the first said end upward whenever the mouth-piece is removed, a

start-and-stop device connectible to the motor of the talking machine and secured to the bracket independently of the lever, and a link connection between the last said end of the lever and the said device whereby the latter serves when connected to the motor to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

12. An automatic start-and-stop mechanism for a talking machine, comprising in combination a bracket adapted to be connected to the talking machine and having two pairs of opposite upward projecting ears, a lever horizontally pivoted between its ends to the ears of one pair and movable between the ears of the other pair, the said lever being adapted at one end to support the mouth-piece of the talking machine, an adjustable screw extending upward through the bracket between the second pair of ears and serving as a stop for the lever, automatic means carried entirely by the bracket and engaging the other end of the lever to move the first said end upward whenever the mouth-piece is removed, a start-and-stop device connectible to the motor of the talking machine and secured to the bracket independently of the lever, and a link connection between the last said end of the lever and the said device whereby the latter serves when connected to the motor to start the motor when the lever is moved upward by the said automatic means and to stop the motor when the lever is moved downward by the weight of the mouth-piece.

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

FRANK L. CAPPS:

Witnesses:

R. H. ORMANET,
P. J. LUNNY.