F. L. DYER.

TALKING MACHINE.

APPLICATION FILED OCT. 20, 1910.

1,054,096.

Patented Feb. 25, 1913.

Fig. 1

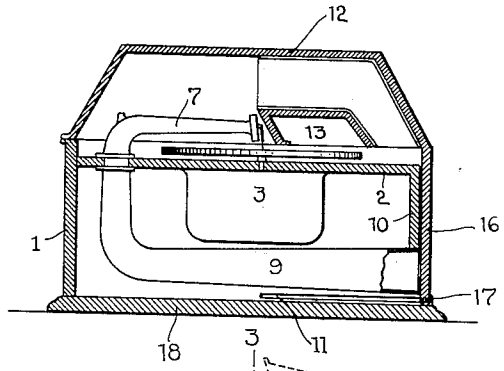


Fig. 2

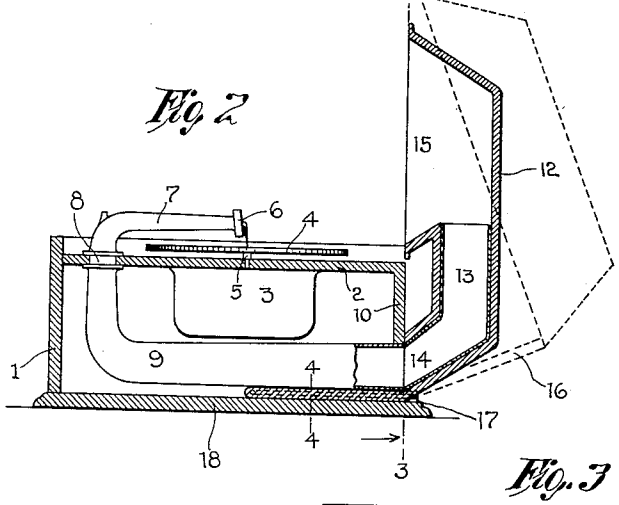


Fig. 4

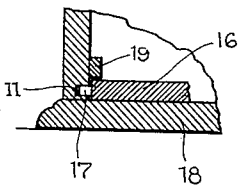
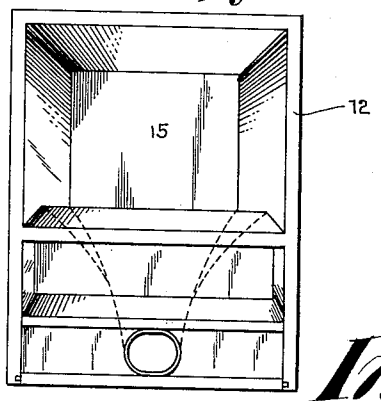


Fig. 3



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UNITED STATES PATENT OFFICE.

FRANK L. DYER, OF MONTCLAIR, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THOMAS A. EDISON, INCORPORATED, OF WEST ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

TALKING-MACHINE.

1,054,096. Specification of Letters Patent. Patented Feb. 25, 1913.

Application filed October 20, 1910. Serial No. 588,069.

To all whom it may concern:

Be it known that I, FRANK L. DYER, a citizen of the United States, and a resident of Montclair, Essex county, New Jersey, have invented certain new and useful Improvements in Talking-Machines, of which the following is a description.

My invention relates to talking machines, particularly those of the so-called "hornless" type, and my object is to provide a simple compact structure in which the cover for the casing and reproducing mechanism may be adjusted when in open position to form a sound amplifying means for the reproducer. Preferably, a sound conduit or tube extends from the reproducer through the cabinet to one side or end wall thereof, provided with an opening in which the conduit ends. The cover has a properly proportioned sound conveying conduit formed therein, and the cover is so mounted upon the casing that when it is opened the sound conveying or amplifying surfaces within the cover are brought into alinement with the end of the conduit in the casing and caused to abut against the same so as to form a continuous sound passageway therewith. This is accomplished by means of movements, both of reciprocation and oscillation, of the cover with respect to the casing, as will hereinafter be more fully described.

Other objects of my invention reside in the construction of parts and combinations of elements, as will be hereinafter more fully described and pointed out in the appended claims.

For a clearer comprehension of my invention, attention is hereby directed to the accompanying drawings, forming part of this specification, and in which—

Figure 1 represents a central vertical cross section through a cabinet and reproducing mechanism embodying my invention, certain parts being shown in side elevation and the cover being shown in closed position; Fig. 2 is a similar view showing the cover in open position, in which it forms a sound amplifier for the reproducer; Fig. 3 is a section on line 3—3 of Fig. 2 looking in the direction of the arrow; and Fig. 4 is a detail cross section taken on line 4—4 in Fig. 2.

Referring to the drawings, the cabinet or casing 1 is provided with a horizontal partition or member 2 beneath which a suitable motor is carried in the casing 3 supported by member 2. A record support or turn-table 4 is mounted above partition 2 and is carried by vertical spindle 5 which is adapted to be rotated by the motor. Reproducer 6 is carried by the hollow arm or sound conveying tube 7 pivotally mounted at 8 in horizontal member 2 at which point it connects with the stationary tube or sound conveying conduit 9 which extends downwardly and forwardly beneath motor casing 3 as shown, terminating in an opening in the end wall 10 of casing 1.

The side members of casing 1 are provided with suitable guideways 11. The cover 12 is provided with a sound conduit 13 extending therethrough, which conduit has a small end 14 and a large exit end 15, as shown. Cover 12 has an end member or extension 16 which, when the cover is closed, is adapted to extend downwardly outside end member 10 of casing 1 to cover the orifice of sound conveying conduit 9, as shown in Fig. 1. This extension 16, the surfaces of which are situated in parallel planes, is provided with horizontally extending pins 17 at the lower end thereof, as shown in Fig. 1, one of said pins extending into the slideway 11 upon one side of the casing, and the other pin 17 extending into the slideway 11 upon the opposite side of the casing. When it is desired to open the cover and place the machine in operative position, cover 12 is swung to the right, as shown in Fig. 2, about pins 17 which are then positioned in the extreme right hand end of slideways 11, as shown in Figs. 1 and 2, and act as pivots for the cover. When the cover has been swung about pins 17 until end member 16 of the cover has reached a horizontal position or is in alinement with slideways 11, the cover is pushed toward the left, referring to Fig. 2, pins 17 sliding in guideways 11 and member 16 sliding upon the bottom 18 of the casing. The side walls of the casing may be provided with guiding strips 19 above the upper surface of end member 16, when the latter is being slid into position. The cover is thus moved into the position indicated in full lines in Fig. 2, in which the cover abuts against the outer surface of end wall 10 of the casing with the small end 14 of conduit 13 of the cover in alinement with the end of conduit 9 within the casing and

forming a continuous sound passageway therewith. In this position, the cover is securely mounted upon side or end 16 thereof which rests upon the bottom member 18 of the casing and is held steadily in place by guiding strips 19 secured to the casing, and by the engagement of pins 17 in slots 11 of the casing. When it is desired to close the cover, the same is slid to the right, referring to Fig. 2, until the pins 17 have reached the extreme right hand end of slots 11, when the cover is raised and oscillated about pins 17 as a fulcrum, the cover being swung to the left until it comes to rest above the casing and reproducer, as shown in Fig. 1, in which position wall 16 of the cover forms an end wall for the casing covering the end of conduit 9. When the cover is in open position, it forms an efficient sound amplifier, the sound reproduced by reproducer 6 issuing forth from the large end 15 of conduit 13 in the cover.

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

1. In talking machines, the combination of a casing, a reproducer carried thereby, a sound conveying conduit extending from said reproducer through said casing and a cover having sound guiding surfaces therein, said cover having a part slidably borne by said casing and pivotal means for said cover carried by said part, said cover being adapted to form a continuation of said conduit when in open position, substantially as described.

2. In talking machines, the combination of a casing, a reproducer carried thereby, a sound conveying conduit extending from said reproducer through said casing and having one end thereof in a wall of said casing and a cover having sound guiding surfaces therein, said cover having a part adapted to cover the said end of said conduit when said cover is in closed position, and said cover being adapted when in open position to form a sound amplifier with said guiding surfaces abutting the end of said conduit in said casing wall, substantially as described.

3. In talking machines, the combination of a casing, a reproducer carried thereby, a sound conveying conduit extending from said reproducer through said casing and a cover having guiding surfaces therein, said casing having a slideway parallel to said conduit and said cover having a member reciprocable in said slideway to aline said guiding surfaces into connection with said conduit when said cover is in open position, and carrying pivot means about which said cover may be oscillated into closed position, substantially as described.

4. In talking machines, the combination of a casing, a sound conveying conduit therein, a reproducing mechanism carried thereby, and a cover therefor having a sound conveying passage therethrough, said cover having a flat extension slidably connected to said casing, and said passage being adapted to form a continuation of said conduit when said cover is in open position, substantially as described.

5. In talking machines, the combination of a casing, a sound conveying conduit therein, a reproducing mechanism carried thereby, and a cover therefor having a sound conveying passage therethrough, said cover having a flat extension slidably and pivotally connected to said casing whereby when the cover is in open position said passage may form a continuation of said conduit, substantially as described.

6. In talking machines, the combination of a casing, a reproducer carried thereby, a sound conveying conduit extending from said reproducer through said casing and a cover having sound guiding means therein, said cover having an extension adapted to cover the outer end of said conduit when said cover is in closed position, and said cover being adapted when in open position to form a sound amplifier with said guiding surfaces abutting the outer end of said conduit, substantially as described.

7. In talking machines, the combination of a casing, a reproducer, a sound conveying conduit extending from said reproducer through said casing, and a cover having sound guiding surfaces therein, having a pivotal connection with said casing to permit opening and closing of the same, and having a sliding connection with said casing whereby translatory movement may be imparted to the same to move said sound guiding surfaces into or out of connection with said conduit, substantially as described.

8. In talking machines, the combination of a casing, a reproducer, a sound conveying conduit extending from said reproducer through said casing, and a cover having sound guiding surfaces therein, said casing having a slideway, and said cover having a member reciprocable in said slideway to aline said guiding surfaces into connection with said conduit when said cover is in open position and carrying pivot means about which said cover may be oscillated into closed position, substantially as described.

This specification signed and witnessed this 12th day of October 1910.

FRANK L. DYER.

Witnesses:
ANNA R. KLEHM,
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