

C. L. HIBBARD.
TALKING MACHINE.
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1,118,902.

Patented Nov. 24, 1914.

Fig. 1.

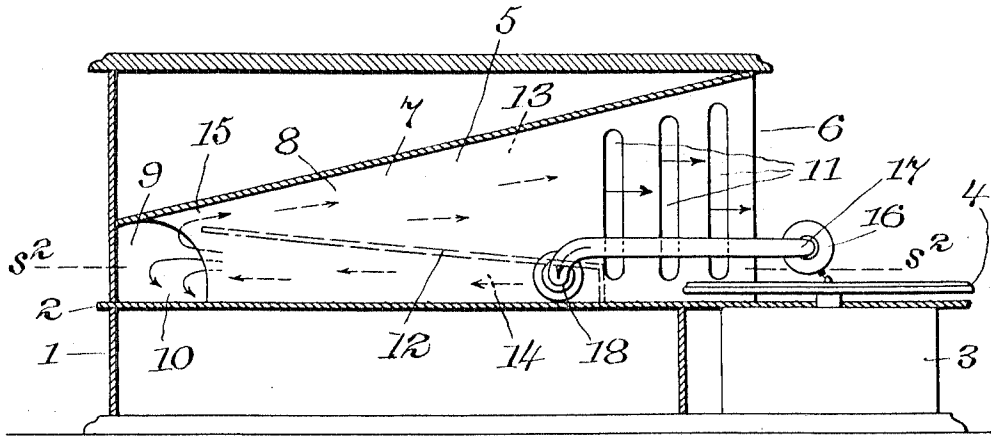
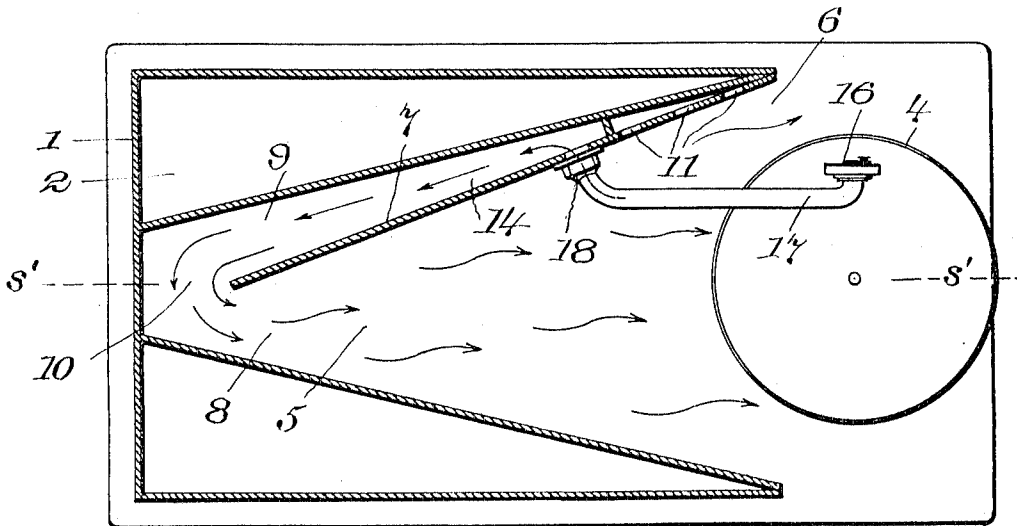


Fig. 2.



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TALKING-MACHINE.

1,118,902.

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To all whom it may concern:

Be it known that I, CHARLES L. HIBBARD, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Talking-Machines, of which the following is a specification.

My invention relates generally to talking machines and has particular reference to the construction and arrangement of the sound amplifier employed in connection therewith.

The object of the invention is to simplify and reduce the cost of the machine, and at the same time give the reproduced sound improved tone quality and greater volume and clearness.

The accompanying drawings will serve to illustrate a construction suitable for carrying my invention into effect. I wish it understood, however, that I do not limit myself to either the exact form or details shown, as various changes may be made therein without departing from the spirit and scope of the invention.

In the drawings—Figure 1 is a central longitudinal section, taken on the line S¹, S¹ of Fig. 2 and Fig. 2 is a horizontal section, taken on the line S², S², of Fig. 1.

Referring now to the drawings, 1 represents the outer casing or cabinet of the machine, which is divided into two compartments by a horizontally disposed partition 2. In a forward extension of the lower compartment there is a motor 3 arranged to drive a turntable 4 mounted above the partition 2 and exteriorly of the casing for convenience in placing records in position thereon and removing them. The lower compartment proper *i. e.* that part in the rear of the motor section, may be used if desired, for the storage of records, etc. The upper compartment of the casing is shaped interiorly to serve as a sound amplifier and comprises a chamber 5, which extends throughout the entire length of the compartment and gradually enlarges from the rear to the full dimensions of the opening 6 in the front thereof, through which opening the reproduced sound passes outward from the amplifier. The chamber 5 is divided longitudinally by a vertically disposed partition 7, into two sound passages 8 and 9, which communicate at their ends

through openings 10 and 11. Within the smaller passage 9, a partition 12, slightly inclined to the horizontal, is arranged to subdivide the passage 9 into two sections 13 and 14, which taper in opposite directions and communicate at one end, near the rear of the machine, through an opening 15. A sound reproducer 16, adapted to coöperate with a record on the turntable in the usual manner, is connected with the smaller end of the passage 14, by means of a tone-arm 17, mounted at 18, in a manner well known in the art, to have free movement in vertical and horizontal planes.

In the several views of the drawings, the course of travel of sound from the reproducer to the point of delivery at the front of the machine, is indicated by arrows. As shown, the sound passes first through the tone-arm 17, to the smaller end of the passage 14. Continuing rearwardly through the same, it enters the main section 8 and the auxiliary section 13 of the amplifier proper, by which it is conducted forwardly and delivered through the opening or open front 6 of the upper compartment 5, the sound from the auxiliary section 13 of the amplifier, entering the main section 8 thereof through the openings 11, as above described.

Having, therefore, described my invention, I claim:

1. In a talking machine, a casing, a sound amplifier comprising a chamber extending and gradually enlarging from the rear to the front of the casing, a vertical partition dividing the chamber into two communicating passages for sound, a transverse partition subdividing one of the passages into two connected sections enlarging in opposite directions, sound reproducing means mounted exteriorly of the casing, and a movable tone-arm interposed as a connection between the sound reproducing means and the sound amplifier.

2. In a talking machine, a casing, a sound amplifier comprising a chamber extending and gradually enlarging from the rear to the front of the casing, a partition dividing the chamber longitudinally into two sound passages communicating at or near both ends, one of the passages being further divided in the direction of its length forming two sections opening one into the other and enlarging in opposite directions, sound

reproducing means mounted exteriorly of the casing, and a movable tone-arm interposed as a connection between the sound reproducing means and the sound amplifier.

- 5 3. In a talking machine, a casing, a sound amplifier comprising a chamber extending and gradually enlarging from the rear to the front of the casing, a partition dividing the chamber longitudinally into two sound
10 passages communicating at or near both ends, one of the passages being of less cross sectional area than the other and further

divided lengthwise into two sections enlarging in opposite directions and opening one into the other at the rear of the casing, 15 sound reproducing means and a movable tone-arm interposed as a connection between the sound reproducing means and the sound amplifier.

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