

L. P. VALIQUET.
TALKING MACHINE.
APPLICATION FILED MAY 8, 1909.

Patented Oct. 26, 1909.
2 SHEETS—SHEET 1.

938,185.

Fig. 2.

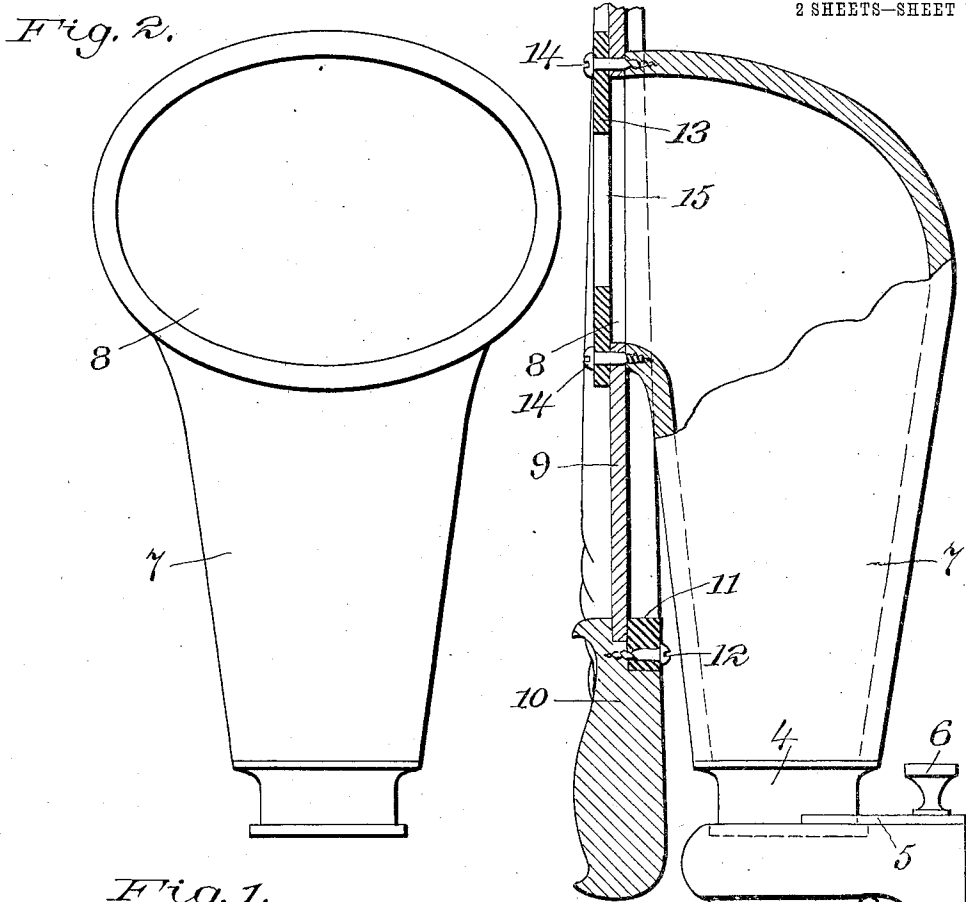
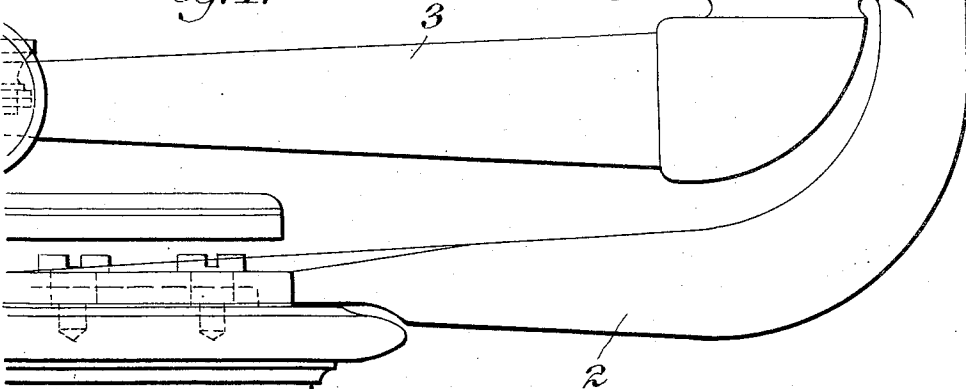


Fig. 1.



WITNESSES

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Fig. 3.

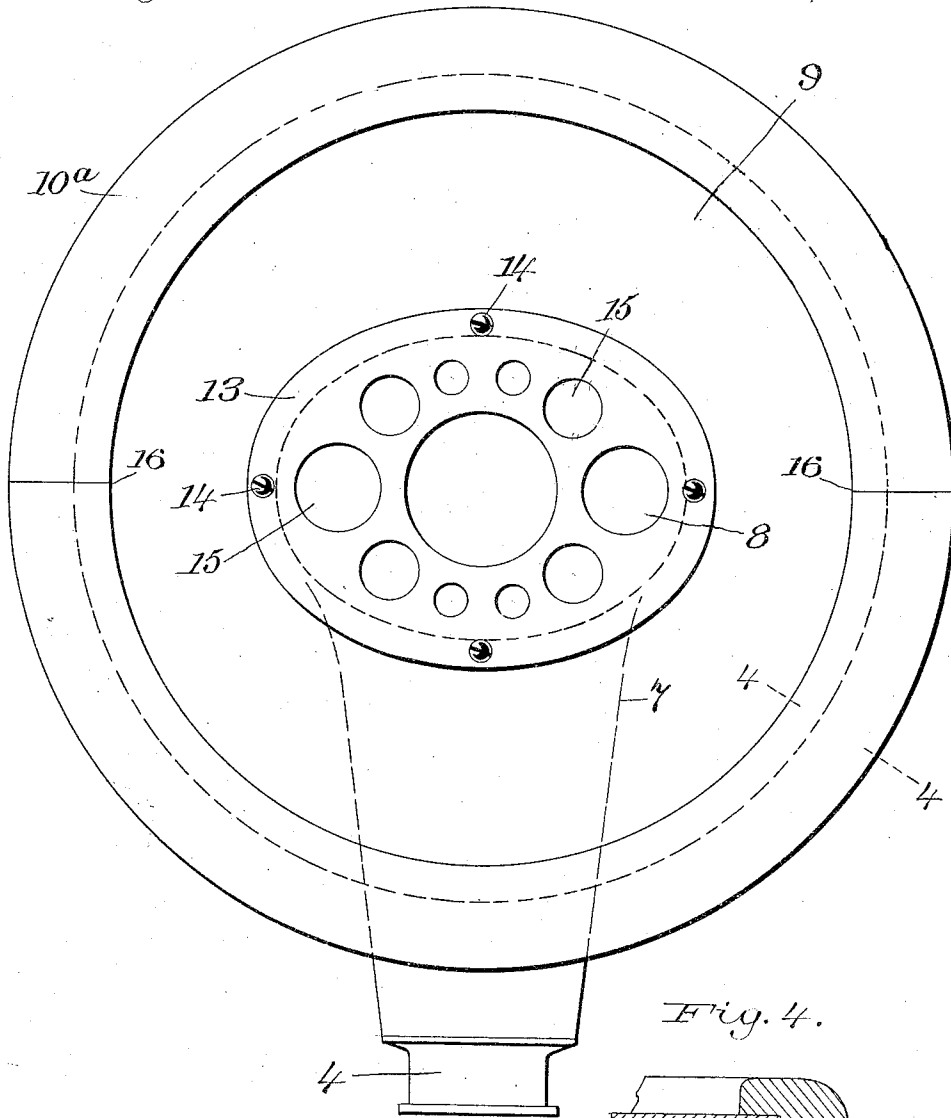
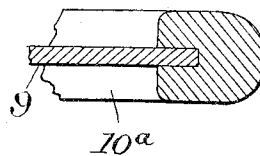


Fig. 4.



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UNITED STATES PATENT OFFICE.

LOUIS P. VALIQUET, OF NEWARK, NEW JERSEY, ASSIGNOR TO COMPLEX AURAL COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

TALKING-MACHINE.

938,185.

Specification of Letters Patent.

Patented Oct. 26, 1909.

Application filed May 8, 1909. Serial No. 494,801.

To all whom it may concern:

Be it known that I, LOUIS P. VALIQUET, a citizen of the United States of America, residing at Newark, county of Essex, State of New Jersey, have invented certain new and useful Improvements in Talking-Machines, of which the following is a specification.

My invention relates to talking machines, and particularly comprises an improved form of sound board or sound modifying and amplifying device for application thereto.

While my invention may be applied to all forms of talking machines, it is particularly adapted in the form shown for use on the ordinary disk record talking machine.

The best form of apparatus embodying my invention at present known to me is illustrated in the accompanying two sheets of drawings in which:

Figure 1 is a side elevation of a portion of a talking machine with one form of my invention applied thereto, the sounding board and attached parts being shown partly in section, and partly broken away. Fig. 2 is a front elevation of the particular form of sound receptacle, which takes the place of the usual horn, forming a part of my invention. Fig. 3 is a front elevation of a modified form of sounding board attached to such sound receptacle, and Fig. 4 is a detail cross section on line 4-4 of Fig. 3.

Throughout the drawings, like reference figures indicate like parts.

1 represents a portion of the body of a talking machine having the usual form of bracket 2 supporting the usual form of tapered arm or tube 3, through the contained air in which sound waves are transmitted.

4 is a coupling ring preferably formed of metal adapted to set in the bracket 2 and be retained therein by the clip 5 and set screw 6.

7 is a short upright slightly flaring sound receptacle formed of wood, its upper larger end being curved so as to form an opening 8 in a vertical plane. To this the sounding board 9 is attached, which should be formed of the best material employed for sounding boards in pianos or similar musical instruments. This sounding board is provided with an outer frame 10, preferably of wood, of heavier construction which may be given any desired ornamental form, as indicated in Fig. 1, or may be made plain or as indicated at 10^a in Fig. 3. The frame 10 is

preferably grooved or rabbeted, as shown in Fig. 4, to receive the sounding board, and the latter may be sprung or slipped into place or may be retained by a strip 11, as shown in Fig. 1, held in position by gluing or by set screws 12, or other fastening.

13 is an inner frame of heavier material than the sounding board, preferably wood, having openings 15, 15, in line with an opening in the center of the sounding board, and all these openings being in line with the opening 8 in the end of the sound receptacle.

The inner frame, sounding board and the sound receptacle may be glued together or fastened by screws 14, 14, or other fastening devices, or by the aid of both glue and fastening devices. In Fig. 3, the frame 10^a is shown made in two parts glued or otherwise fastened together at 16, 16.

In operation, my invention acts like the sounding board of a piano or the body of a violin to amplify and enrich the sound vibrations so that round musical tones are produced by even the poorer qualities of sound records and machines, and the sound amplified to an extent equal to the effect which would be produced by a very large horn.

Another advantage of my invention is that the sound waves are evenly dispersed in many directions, instead of being all focused along one line, as is the case with the ordinary horn not provided with a sound deflector. This feature helps greatly where a large number of people desire to hear a record reproduced.

It is evident of course that changes could be made in the form of the sounding board and its connections and the method of assembling and connecting the same, without departing from the principle of my invention, although I find that the best results are produced by approximately the contour of sound receptacle and arrangement of parts shown in the drawing. I also find that the best effects are produced when the sounding board is not positively fastened to the outer frame but snugly fitted into same. This leaves the sounding board free to vibrate. Furthermore, the best results are obtained only when the sound receptacle 7 is made of wood, and the sounding board 13 is attached immediately to it. The use of intervening stays or other intermediate con-

nection interferes with the perfect transmission of the vibrations from sound receptacle to sounding board.

While various methods of fastening the wooden sounding board to the wooden sound receptacle are effective in varying degree, the best result is only secured when the two are glued together so as to form practically an integral structure.

10 Having, therefore, described my invention, I claim:

1. In a talking machine, the combination with the usual tube through the contained air in which reproduced sound waves are transmitted, of a wooden sound receptacle open at one end and having its interior connected with said tube, and a sounding board attached to said open end of said sound receptacle.

20 2. In a talking machine, the combination with a wooden sound receptacle open at one end, of a sounding board attached to the open end thereof, and provided with an opening in line with the opening of the sound receptacle.

3. In a talking machine, the combination with the usual tube through the contained air in which reproduced sound waves are transmitted, of a vertical wooden sound receptacle open at one end and having its interior connected with said tube, and a sounding board attached to said open end of said sound receptacle.

4. In a talking machine, the combination with a vertical wooden sound receptacle, open at the end, of a sounding board attached to the open end thereof, and provided with an opening in line with the opening of the sound receptacle.

5. In a talking machine, the combination with a wooden sound receptacle, open at one end, of a sounding board attached to the open end thereof, and provided with an exterior frame of heavier construction.

6. In a talking machine, the combination with a wooden sound receptacle, open at one end, of a sounding board attached to the open end thereof, and provided with an opening in line with the opening of the said sound receptacle, and an exterior frame of wood of heavier construction.

7. In a talking machine, the combination with the usual tube through the contained air in which reproduced sound waves are transmitted, of a wooden sound receptacle open at one end and having its interior connected with said tube, and a sounding board

glued to said open end of said sound receptacle.

8. In a talking machine, the combination with a wooden sound receptacle, open at one end, of a sounding board glued to the open end thereof, and provided with an opening in line with the opening of the said sound receptacle.

9. In a talking machine, the combination with a wooden sound receptacle open at one end, of a sounding board attached to the open end thereof, and provided with an opening in line with the opening of the said sound receptacle and a grooved exterior frame of wood with which the edges of the sounding board engage.

10. In a talking machine, the combination with a wooden sound receptacle open at one end, of a sounding board attached to the open end thereof and provided with an opening in line with the opening of the said sound receptacle, an open framework of heavier construction placed over said opening, and an exterior frame for the sounding board also of heavier construction.

11. In a talking machine, the combination with a wooden sound receptacle open at one end, of a sounding board attached to the open end thereof, and provided with an opening in line with the said opening of the sound receptacle, an open framework of heavier construction placed over said opening, and an exterior grooved frame for the sounding board with which the edges of the sounding board engage.

12. In a talking machine, the combination with an upright wooden sound receptacle curved to form an opening in a vertical plane, of a sounding board attached to the open end thereof and provided with an opening in line with the said opening, an open framework of heavier construction placed over said opening, and an exterior grooved frame for the sounding board with which the edges of the sounding board engage.

13. In a talking machine, the combination with a sound receptacle open at one end, of a sounding board attached immediately to the open end thereof, and provided with an opening in line with the opening of the said sound receptacle.

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Witnesses:

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