

Jan. 2, 1923.

F. S. VALLADAO,
PHONOGRAPH,
FILED FEB. 21, 1922.

1,441,188.

Fig. 1.

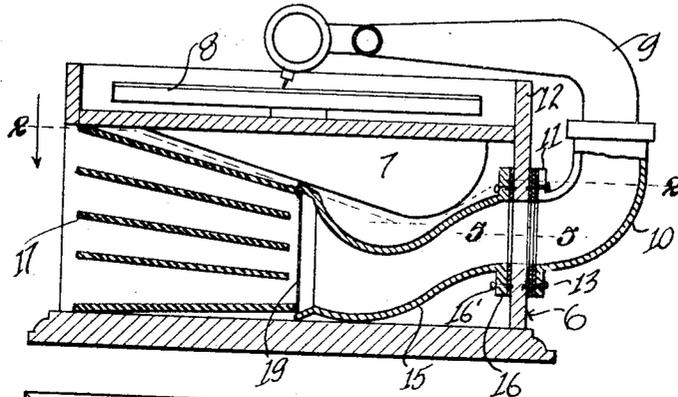


Fig. 2.

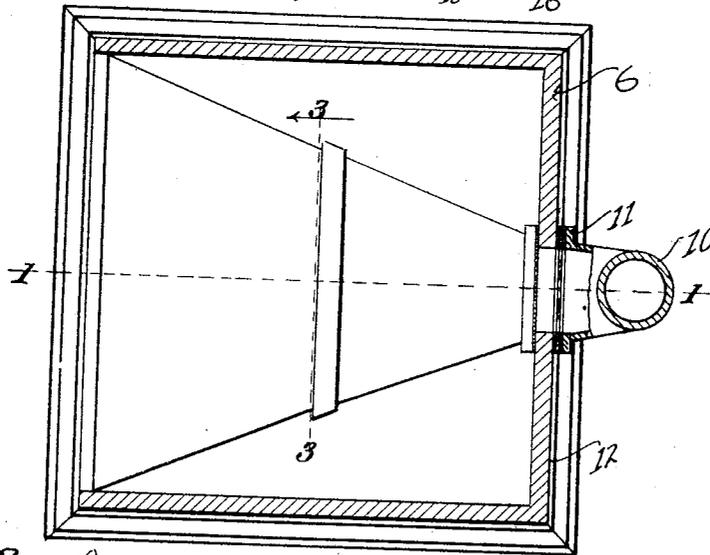


Fig. 3.

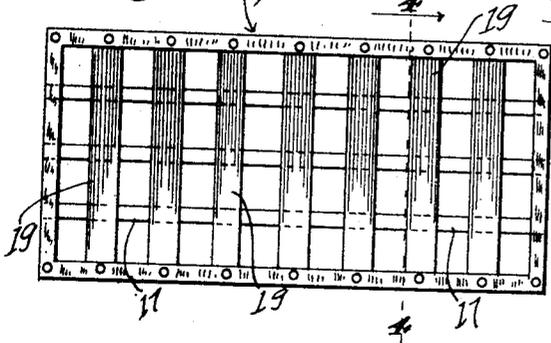


Fig. 4.

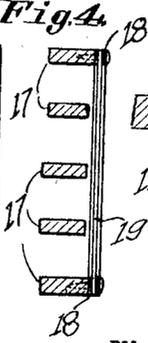
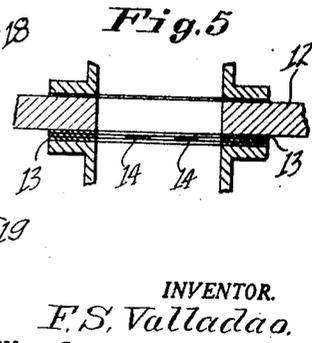


Fig. 5.



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UNITED STATES PATENT OFFICE.

FREDERICK S. VALLADAO, OF SAN FRANCISCO, CALIFORNIA.

PHONOGRAPH.

Application filed February 21, 1922. Serial No. 538,420.

To all whom it may concern:

Be it known that I, FREDERICK S. VALLADAO, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Phonographs, of which the following is a specification.

This invention relates to phonographs and has particular reference to an improved phonograph construction whereby the sound is intensified, the vibration is increased and the metallic tone is reduced to a minimum.

A further object of this invention is to equip a phonograph of conventional construction with my improved means without materially altering the construction of the machine.

Another object of this invention is to improve a phonograph by the application of means which are simple in construction, economical to manufacture and highly serviceable.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a longitudinal vertical section on the line 1—1 of Figure 2,

Fig. 2 is a cross section on the line 2—2 of Fig. 1,

Fig. 3 is a front elevation of a supporting frame having my sound intensifying means applied thereto,

Fig. 4 is a transverse vertical section on the line 4—4 of Figure 3, and

Fig. 5 is a horizontal section on the line 5—5 of Fig. 1.

In the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 6 designates a phonograph box equipped with a housing 7 containing the motor and the other operating mechanism of a phonograph capable of turning a turntable 8 mounted on the top of the box 6. Adapted to support the tone arm 9 is a bracket 10 provided with an annular flange 11. This flange is preferably secured to the rear wall 12 of the box by fastening elements 13.

Interposed between the flange 11 and the rear wall 12 of the box I have provided felt strips designated by the numeral 13 which in turn have positioned therebetween mica strips 14 preferably two in number, between which the sound waves coming through the tone arm 9 are adapted to pass and be vibrated thereby.

The numeral 15 designates the goose neck of the phonograph which is equipped with an annular flange 16 secured to the inner surface of the rear wall 12 of the box by fastening elements 16'. Between the flange 16 and the wall 12 I propose to position additional felt pieces.

Between the front end of the goose neck 15 and the sound dividing baffles 17 there are disposed connected frames 18 preferably made of felt material. These frames have positioned therebetween a plurality of vertically disposed spaced mica strips 19 of substantial width. The strips being retained in position between the frames by a plurality of fastening elements. As shown to advantage in Figures 1 and 4, the frames are connected to the upper and lower baffles and the strips of mica are then most conveniently disposed in the path of the sound waves for ready vibration. By insulating the mica strips from metal or wood it will be obvious that the sound waves will be intensified, the vibration increased and the metallic tone, so annoying in phonographs will be reduced to a minimum.

In practise I have applied these mica strips and their associated felt frames to phonographs and have obtained clarity of sound and the above mentioned features described.

From the foregoing description taken in connection with the accompanying drawing it will be evident that I have improved the construction of phonographs so that the means for accomplishing the desired result can be applied thereto without materially altering the construction of any phonograph and can also be applied in a minimum amount of time and without any great outlay of expense on the part of the user.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resort-

ed to without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I
5 claim:—

In a device of the character described, the combination with a phonograph cabinet, a

tone bracket adapted to be exteriorly secured to said cabinet, cushion means secured between said bracket and said cabinet, and 10 spaced mica strips secured to said cushion means.

In testimony whereof I affix my signature.
FREDERICK S. VALLADAO.