A. E. MADISON.

CABINET FOR SOUND REPRODUCING MACHINES.

APPLICATION FILED NOV. 10, 1908.

946,243.

Patented Jan. 11, 1910.

2 SHEETS—SHEET 1.

Fig 1.

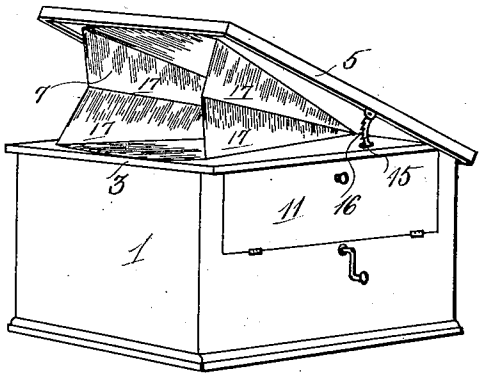


Fig 2.

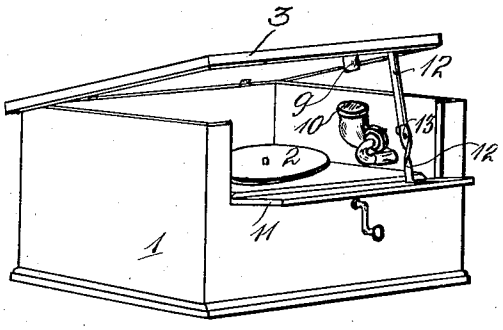


Fig 3.

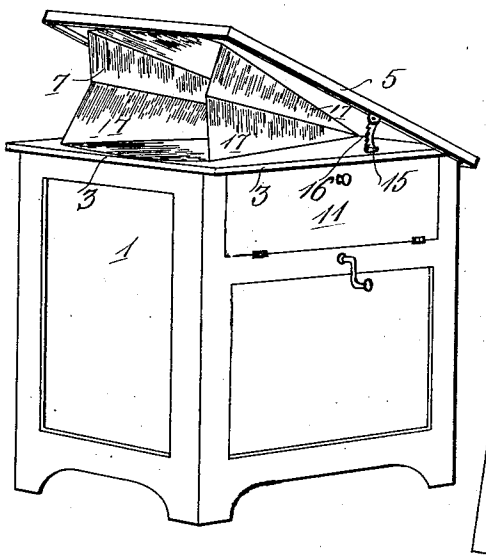
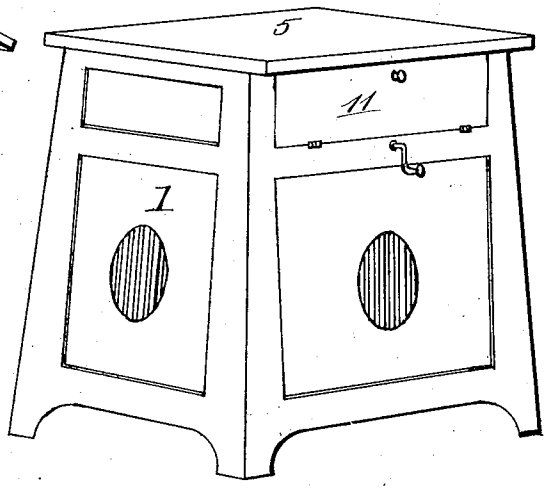


Fig 4.



WITNESSES.

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2 SHEETS—SHEET 2

Fig 5.

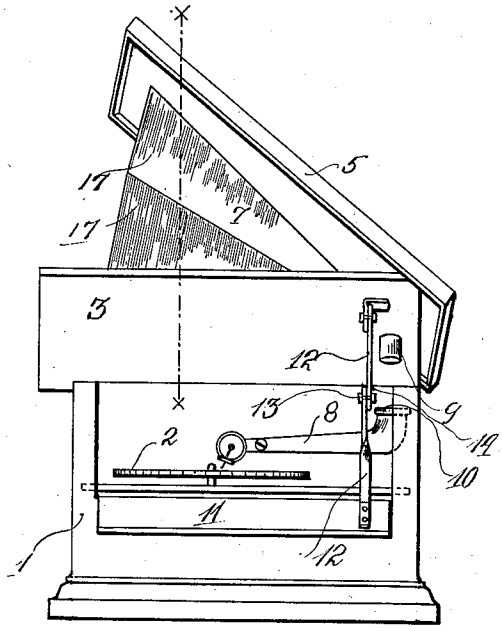


Fig 6.

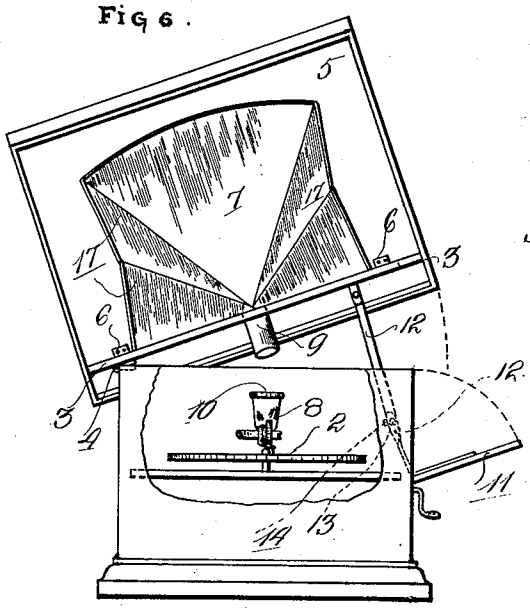


Fig 7.

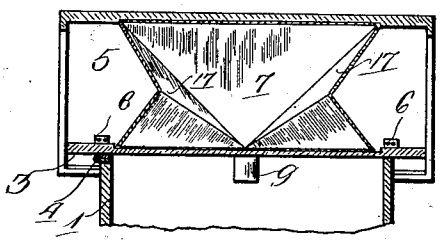
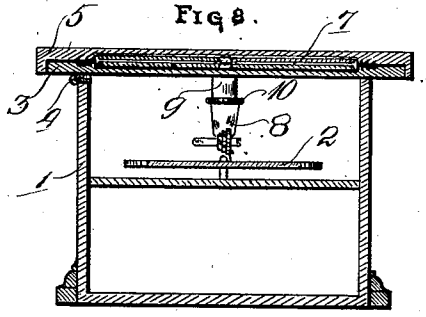


Fig 8.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ARTHUR E. MADISON, OF SANTA BARBARA, CALIFORNIA.

CABINET FOR SOUND-REPRODUCING MACHINES.

946,243. Specification of Letters Patent. Patented Jan. 11, 1910.

Application filed November 10, 1908. Serial No. 461,894.

To all whom it may concern:

Be it known that I, ARTHUR E. MADISON, a citizen of the United States, residing at Santa Barbara, in the county of Santa Barbara and State of California, have invented certain new and useful Improvements in Cabinets for Sound-Reproducing Machines, of which the following is a specification.

This invention has reference to a cabinet for sound reproducing machines, and particularly contemplates the provision of a collapsible or foldable horn or sound amplifier, which forms a part of the cabinet.

One of the objects of this invention is to provide a cabinet for sound reproducing machines with a self-contained sound horn, which, forming a unit with the cabinet, is capable of being concealed from view, thus rendering the cabinet conveniently portable, eliminating the necessity of a separate horn, and removing all liability of injury to the horn.

Another object of this invention is to provide a cabinet for sound reproducing machines having a self contained horn, which may be opened to its fullest extent or only to a limited extent whereby to obtain a modulation of the sounds emitted during the reproduction of a record.

With these and other objects in view, this invention consists of the features, details of construction, and combination of parts, as will be described in connection with the accompanying drawings, and then be more particularly pointed out in the claims.

In the drawings, Figure 1, is a perspective view, showing the invention as applied. Fig. 2, is a perspective view showing the lids and the lateral door in open position. Fig. 3, is a perspective view showing the invention as applied to a cabinet, the horn being shown in open position. Fig. 4, is a perspective view showing a cabinet with the lids closed. Fig. 5, is a side elevation showing the sound reproducing box, the two lids in open position, and the interposed collapsible horn. Fig. 6, is a front elevation, showing the open position of the lids, and the open position of the lateral door, by means of which the records and needles may be changed. Fig. 7, is a sectional elevation, showing the lid and the horn attached thereto only partly open, the cabinet or motor-containing box being shown in fragment. Fig. 8, is a sectional view, showing the interposed foldable horn in closed position.

Specifically referring to the drawings, 1, designates a box for the sound-reproducing machine 2.

3 is a lid hinged at 4, to one side of the box 1, and 5, designates another lid hinged at 6, to said lid 3. Interposed between said lids 3 and 5, is a sidewise collapsible or foldable horn or sound amplifier 7, fastened in any suitable manner to said lids 3 and 5, which horn or sound amplifier tapers rearwardly toward the rear of both lids.

Communication is afforded between the horn 7, and the tone arm 8, by a tube 9, which extends into an opening provided therefor in the lid 3, as seen in Figs. 2, 5, 6 and 7, and which projects on the underside of said lid 3, to a sufficient distance to conveniently fit into the terminus 10 of the tone arm 8.

The provision of a tube for transmitting the sounds from the tone arm to the sound horn or amplifier, is not an absolute requisite, but has been employed and shown in the present instance merely to illustrate a means for readily causing the direct travel of sound vibrations to the horn. It is, however, obvious, that the terminus of the tone arm may be in direct communication with the horn, without the interposition of any means to carry the sounds from the record to the horn.

In order to permit of the easy access to the interior of the box 1, I provide a lateral door 11, arranged to swing outwardly beneath the lid 3, and to cause the simultaneous opening of the said lateral door 11, with the reversely hinged lids 3 and 5, I provide links 12, on the said door and the lid 3, which links are joined together by a pivot pin 13. To permit of the travel of said links a trifle beyond the point of dead center, a lug 14 is provided on one of the links, and in this manner the links form a rigid support for holding open the lids 3 and 5 and the door 11.

15 designates a means in the nature of a curved rod, pivoted to the underside of the lid 5 and arranged to hold said lid 5 open relatively to said lid 3. It is provided with teeth 16, which are arranged to engage the lid 3, whereby to regulate the extent to which the collapsible or foldable horn may be opened, and also to retain the lid 5 in its adjusted position. Thus by regulating the size of the opening of the horn, the sounds emanating from the tone arm may

be considerably modulated according to desire.

The collapsible or foldable horn 7, as shown in the drawings, consists of segmental strips 17 of any suitable material best adapted for the purpose, and joined at the edges in such manner as to have movement relatively to each other, but any collapsible or foldable horn or sound amplifier, forming an integral part of the cabinet, irrespective of the construction thereof, may be employed in connection with this invention, without departing from the spirit thereof.

When the invention is embodied in a non-portable or stationary cabinet, as shown in Figs. 3 and 4, it is obvious that the same may be conveniently used as a table by closing the lids, thereby removing the horn.

What I claim, is:

1. A cabinet for sound reproducing machines and the like, having a lid provided with a horn, said horn being arranged to be expanded and collapsed by said lid.

2. A cabinet for sound reproducing machines and the like having two lids and a horn secured to both of said lids and arranged to be opened and closed with one of said lids.

3. A cabinet for sound reproducing machines and the like, having a lid, and a foldable horn connected with said lid and said cabinet, and arranged to be opened and closed with said lid.

4. A cabinet for sound reproducing machines and the like, comprising a box having two lids, and a foldable horn interposed between and connected with said lids.

5. A cabinet for sound reproducing machines and the like, comprising a box having two lids, one of said lids having communication with the interior of the cabinet, and a foldable horn interposed between said lids and arranged to be opened and closed by one of said lids.

6. A cabinet for sound reproducing machines and the like, comprising a box having reversely hinged lids, and a foldable horn interposed therebetween.

7. A cabinet for sound reproducing machines and the like, comprising a box having reversely hinged lids, a foldable horn interposed between said lids arranged to be opened and closed by one of said lids, and a connection for the tone arm of such sound reproducing machine.

8. A cabinet for sound reproducing machines and the like, comprising a box having a lateral door, reversely hinged lids on said box, a foldable horn interposed between said lids and arranged to be opened and closed by one of said lids, communicating means between said foldable horn and the tone arm of such sound reproducing machine, said means being connected with one of said lids, and means connected with one of said lids and said lateral door, to open said lateral door simultaneously with said lids.

9. A cabinet for sound reproducing machines and the like comprising a box having reversely hinged lids, a foldable horn interposed between and connected with said lids, and means to hold the lids in open position.

10. A cabinet for sound reproducing machines and the like comprising a box having lids arranged to open in different directions, a foldable horn interposed between and connected with said lids said horn being arranged to be expanded and collapsed by one of said lids, and means to hold one of said lids open relatively to the other.

11. A cabinet for sound reproducing machines and the like having two lids opening in different directions relatively to each other, one of said lids having communication with the interior of the cabinet, and a foldable horn connected with and interposed between said lids.

12. A sound reproducing machine cabinet having two lids provided with a plurality of segmental strips secured to said lids and forming a horn, said strips being adapted to be expanded and collapsed by one of said lids.

13. In combination with a cabinet for sound reproducing machines and the like having a lid, a plurality of hinged segmental strips connected with said lid and said cabinet and forming a horn, said horn being arranged to be opened and closed by said lid.

In testimony whereof I affix my signature in the presence of two witnesses.

ARTHUR E. MADISON.

Witnesses:

ANTON GLOETZNER, JR.,

JOSEPH J. PERKINS.