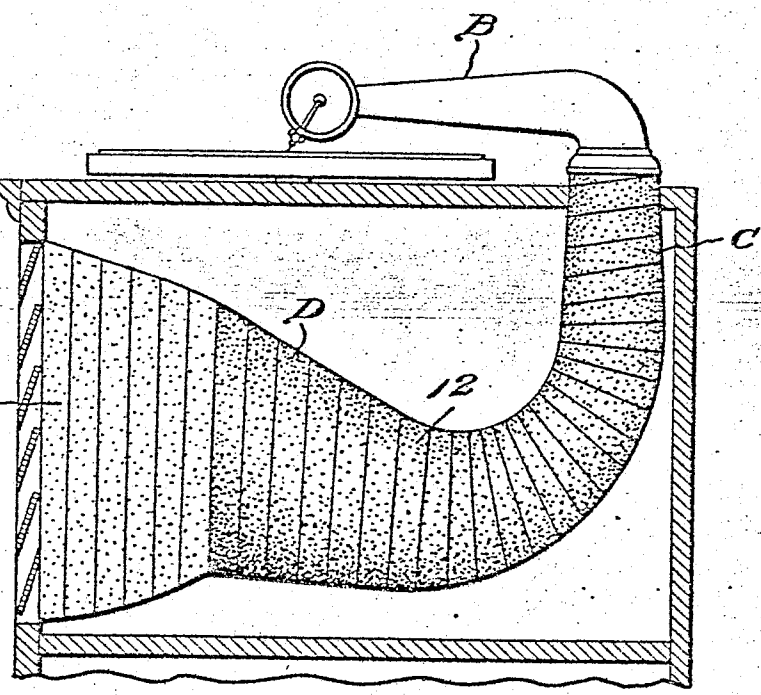
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G. P. THEIS.
TALKING MACHINE HORN.
APPLICATION FILED DEC. 30, 1918.

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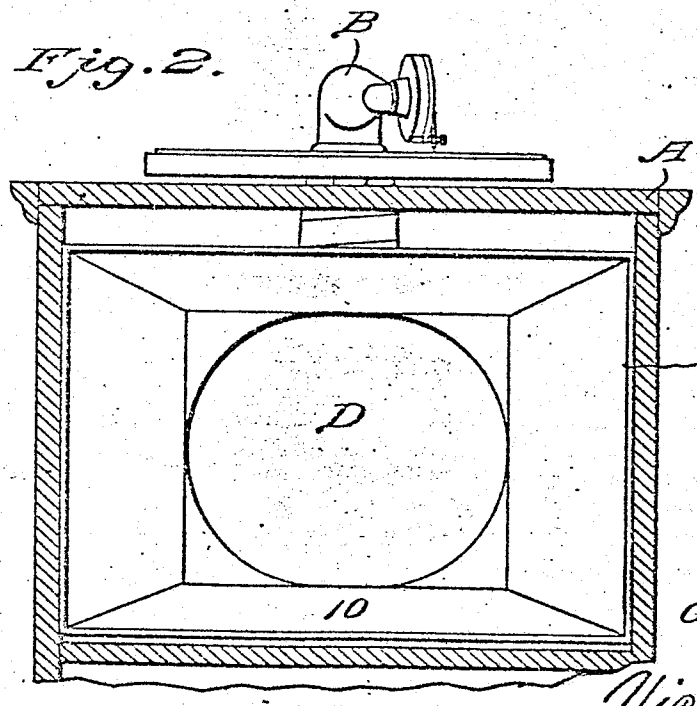
Patented Mar. 1, 1921.
2 SHEETS—SHEET 1.

Fig. 1.



fabric wound spirally on horn

Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

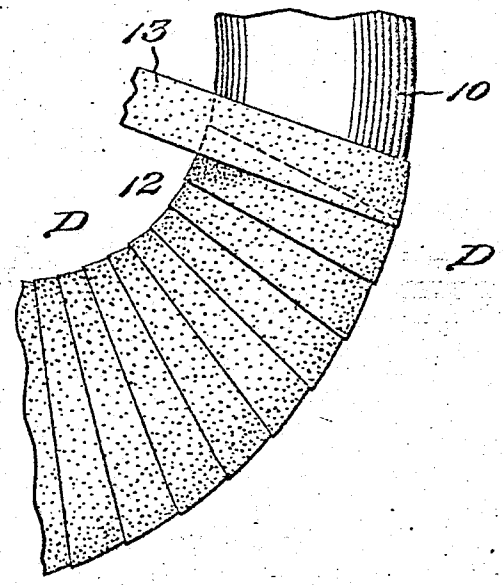


Fig. 4.

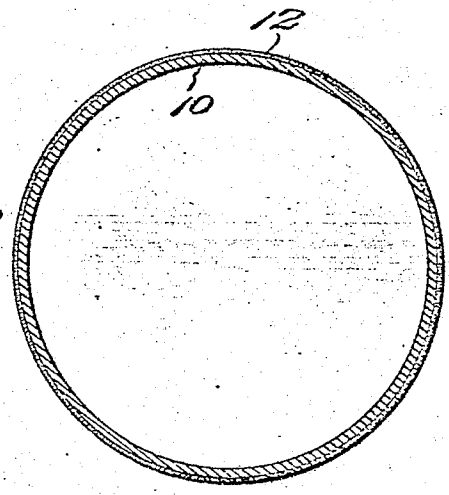
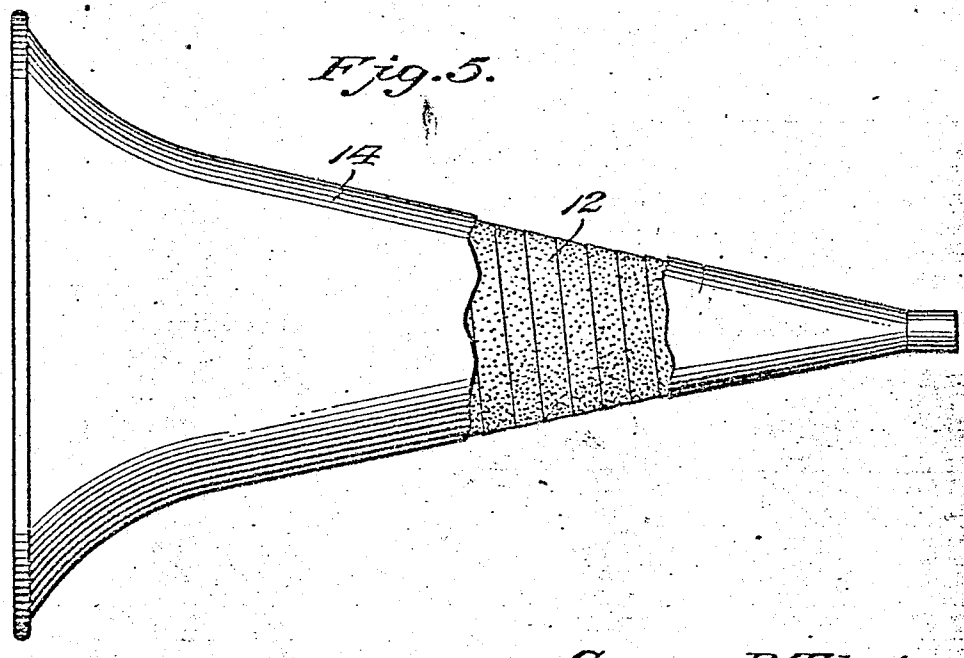


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE P. THEIS, OF DAYTON, OHIO.

TALKING-MACHINE HORN.

1,370,382. Specification of Letters Patent. Patented Mar. 1, 1921.

Application filed December 30, 1918. Serial No. 268,813.

To all whom it may concern:

Be it known that I, GEORGE P. THEIS, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented new and useful Improvements in Talking-Machine Horns, of which the following is a specification.

This invention relates to talking machines, particularly to the sound amplifying horns thereof, and has for its object the provision of a talking machine horn so constructed as to eliminate the metallic jangling and clatter caused by the vibration of the metallic horns commonly used.

An important and more specific object is the provision of a horn or amplifier consisting of an inner section of fibrous non-metallic material, an outer section of fabric, and a coating of adhesive holding the inner and outer sections together.

A further object is the provision of a horn of this character which may be either of the exposed type or of the type used in talking machines of the cabinet style, the construction of the horn being the same in either instance and being such as to afford proper resonance while avoiding any metallic tones.

A further object is the provision of a horn of this character which will be very simple and inexpensive in manufacture, highly efficient and durable in use, and a general improvement in the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed, and illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal sectional view through a talking machine of the cabinet type showing the horn in side elevation,

Fig. 2 is a cross sectional view through the talking machine showing the horn in end elevation,

Fig. 3 is a view on a much larger scale showing a fragmentary side elevation of the horn detached with a portion of the fabric covering removed showing the method of winding the same,

Fig. 4 is an enlarged detail sectional view through a portion of the horn, and

Fig. 5 is a side elevation of the horn constructed as a horn of the exposed type.

Referring more particularly to the drawing, the letter A designates a talking machine of the cabinet type in which the tone arm B communicates with the small end C of a tone horn D. The construction of the talking machine itself forms no part of the present invention though certain parts thereof are shown for the sake of illustration.

My invention resides in the construction of the horn D. In carrying out my invention I form the horn D of an inner section 10 of non-metallic material, preferably paper, card-board, or papier mâché, which may be pressed or otherwise formed into the proper shape. As is common in horns for this particular purpose, the horn D has its constricted end formed cylindrical and its large end 11 formed rectangular. Wound upon the inner section 10 is a layer 12 of fabric of any suitable material and texture. This fabric might be applied in different ways and might even be cut to shape and molded upon the inner section 10, though I preferably form it from a strip 13 of suitable width wound spirally upon the inner section 10 with the edges of each convolution in overlapping relation to the preceding convolution, as clearly shown in the drawings. If desired, the inner section 10 may be coated with adhesive before the strip 13 is wound thereupon, and after the strip 13 has been applied a coating of shellac is applied to the exterior thereof. Even though no adhesive be used before the fabric is applied, the coating of shellac applied exteriorly to the fabric will soak through and hold the fabric closely onto the inner section. The horn constructed in this manner is positioned within a talking machine in the ordinary manner and will perform all the functions of the present style of metallic horn in exactly the same manner, providing proper resonance and amplification of the sounds while eliminating the disagreeable metallic tones caused by the vibration of a metallic horn. Actual experiment has demonstrated that a horn constructed in this manner insures the emission of a clear tone of ample volume unaccompanied by any distasteful clangor.

While the invention contemplated primarily the provision of a horn designed for use in connection with talking machines of the cabinet type, I intend that the old style horn of the entirely exposed type may be constructed in the same manner. In Fig. 5 I have shown a horn of this type and in this form it is of course preferable for the sake of pleasing appearance that an additional

layer 14 of paper or other similar material be applied exteriorly upon the layer of fabric so as to provide a smooth finish.

While I have shown and described the preferred embodiment of the invention, it will of course be readily understood that I reserve the right to make such changes in the details of construction, size, specific shape and employment of specific materials, as will not depart from the spirit of the invention nor the scope of the subjoined claim.

Having thus described my invention, I claim:—

A talking machine horn comprising an inner body formed of fibrous material, a strip of fabric wound spirally upon said inner body with the edges of the convolutions in overlapping relation to form in effect a continuous layer, and an adhesive coating applied externally upon said fabric layer.

In testimony whereof I affix my signature.

GEORGE P. THEIS.