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1,923,965

ACOUSTIC DIAPHRAGM

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Fig. 1.

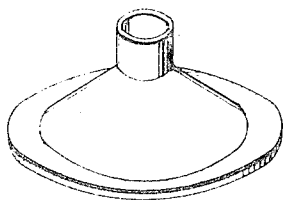
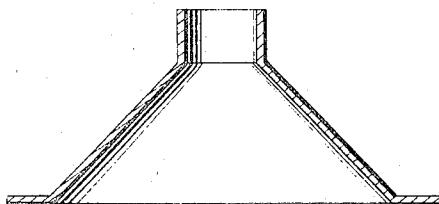


Fig. 2.



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ACOUSTIC DIAPHRAGM

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2 Claims. (Cl. 181—32)

My invention relates to improvements in the construction of diaphragms for the producing and reproducing of sound. The objects of my invention are to produce a diaphragm of uniform thickness and structure without any seams or splices or folds or wrinkles and in so constructing such a diaphragm to eliminate so-called paper rattles as well as to lower the cost of constructing such diaphragms.

Ordinarily diaphragms of this sort are produced by cutting out a piece of flat fibrous material and forming it in a cone-shaped mold and cementing it in such a manner as to construct a conical diaphragm therefrom. In my process the fibrous material will be taken from a vat or container of raw stock in a liquid or dry powdered state and uniformly spread on a conical form or forms and then pressed in such a manner as to force this material to assume the desired conical or funnel shape conforming to the shape of the mold in which it is pressed, thus obtaining a smooth surfaced diaphragm of uniform structural thickness, texture and strength.

Referring to the accompanying drawing which forms a part of this specification, Figure 1 represents a cone so formed; and Fig. 2 represents a modified form of the invention.

Fig. 1 represents a cone consisting of a hollow circular truncated cone with a hollow cylindrical throat extending from the truncated end of the cone and having a flange of the same material extending around the base, the whole being constructed as a unit without seams, folds, wrinkles or joints of any kind.

Figure 2 represents a seamless one-piece diaphragm with a body in the form of a truncated cone and having a flange extending around the base of the conical part.

What I claim is:

1. An acoustic diaphragm comprising a conical wall, an annular flange surrounding the base of the cone, and an axial cylindrical tube at the apex thereof, the entire diaphragm being integrally molded, homogeneous, and of unbroken continuity, and of substantially uniform thickness throughout.

2. An acoustic diaphragm comprising a conical wall, an annular flange surrounding the base of the cone, and an axial cylindrical tube at the apex thereof, the entire diaphragm being integrally molded, homogeneous, and of unbroken continuity.

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