

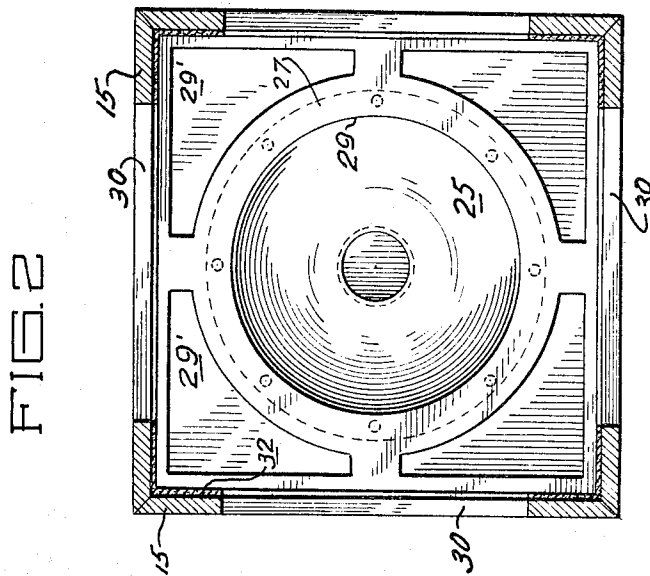
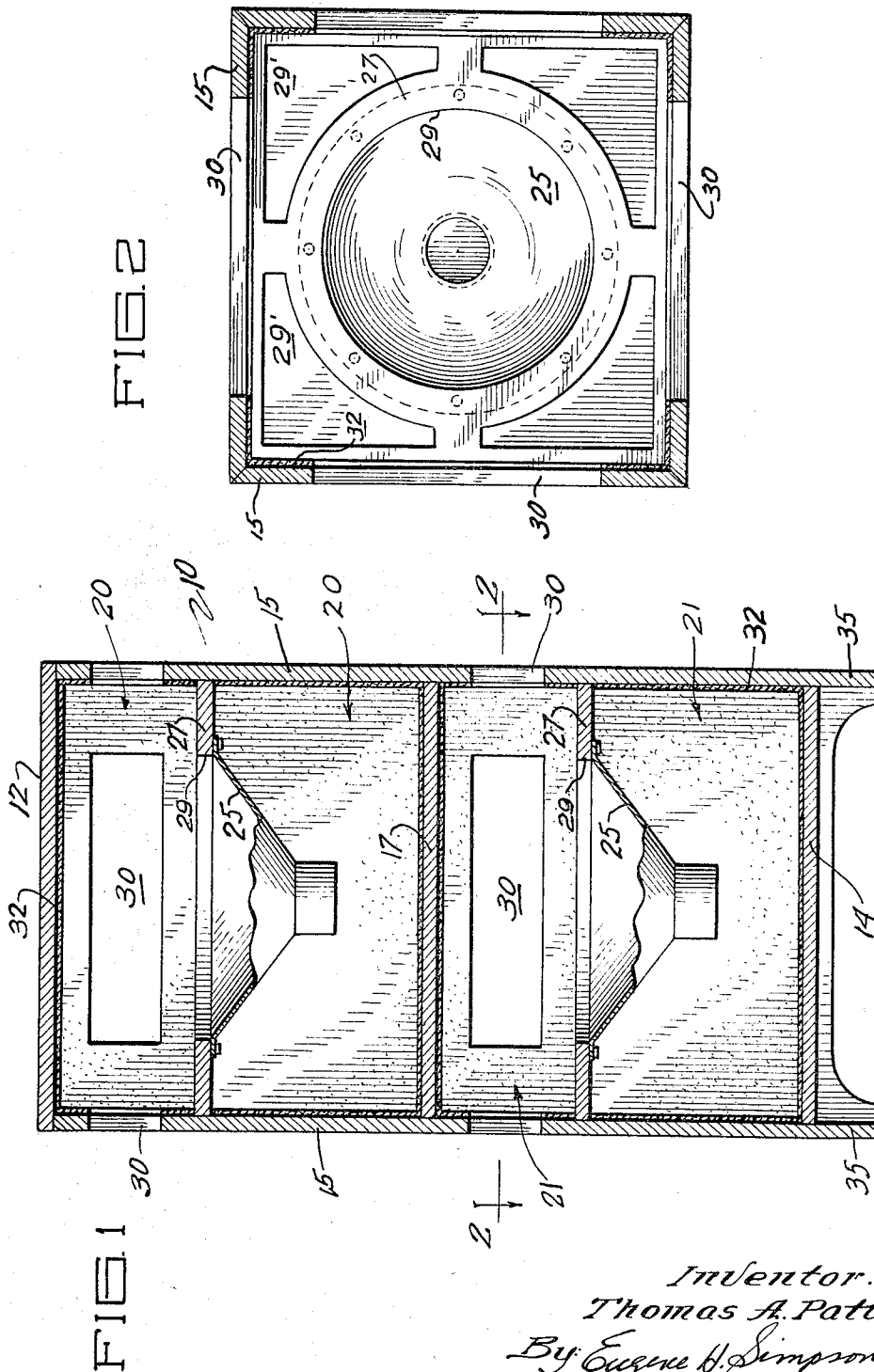
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SOUND REPRODUCTION SYSTEM

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SOUND REPRODUCTION SYSTEM

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1 Claim. (Cl. 181-31)

This invention relates to sound reproduction systems, or the like, and more particularly to an arrangement or mounting of one or more speakers in a cabinet to faithfully reproduce either vocal or instrumental renditions in a plurality of directions with clearness and without distortion.

In the design of speaker systems to amplify either voice or musical compositions it is necessary not only to produce an instrument that will project the sound in a plurality of directions but also to give a clear reproduction free from reverberation and echoes.

It is an object of this invention to provide a sound reproduction system which will give a large volume of sound with clear tones.

Another object of the invention is to provide a sound reproduction system which will reproduce sound more faithfully than those now available.

A further object is to provide a sound reproduction system that will project sound in a plurality of directions with a minimum of distortion.

Other objects will become apparent upon considering the following specification which when considered in conjunction with the appended claim will describe a preferred form of the invention.

In terms of broad inclusion the invention comprises, a cabinet having a polygonal top at the upper end of the cabinet and a matching polygonal bottom at the lower end of the cabinet, substantially rectangular side pieces secured between the polygonal top and bottom, said side pieces having openings adjacent the polygonal top member, a speaker support element intermediate the top and bottom members, said element having a plurality of apertures extending vertically therethrough for the transmission of sound, and a speaker secured on a vertical axis to said element and adapted to reproduce sound and direct it through all of said apertures.

In the drawings:

FIG. 1 is a vertical cross-section taken through the center of the sound reproduction system made in conformance with the present invention; and

FIG. 2 is a horizontal cross-section taken on the line 2-2 of FIG. 1.

Referring to the drawings, a speaker cabinet, generally designated 10, has a polygonal top or closure 12 and a lower polygonal closure 14 joined by vertical panels 15.

The top 12 and the bottom 14 have been shown as square, but it will be understood that they may be composed of any number of sides desired.

As shown in FIG. 2 the cabinet may be divided in half by a polygonal transverse partition 17 conforming in shape to the top and bottom so as to form two sound chambers 20-21. If desired, one of the chambers may be eliminated and the unit operated with a single speaker.

In order to mount speakers 25-25 in their chambers 20-21, mounting rings or partitions 27-27 are secured between the sides of the cabinet and are provided with a

2

plurality of apertures 29'-29' therethrough to permit free passage of sound through each of the chambers 20-21.

The individual speakers 25-25 are joined to the apertured partitions about the periphery of the central aperture 29 therein.

Sound from the speakers 25-25 travels upwardly through the circular apertures 29-29 and is forced out through apertures 30 passing through each of the panels 15 located both below the top 12 and below the partition 17.

In order to prevent a reverberating effect due to the closed bottom chambers 20-21, the interior of the cabinet and both the top 12 and the bottom closures 14 are lined on the inside of the cabinet with fiber glass 32 or other sound absorbing material, and both the top and bottom sides of the central partition 17 are also lined with fiber glass or the like. The provision of the fiber glass linings prevents reverberations and produces clear sound from the speakers.

A suitable footing structure, such as shown at 35, in FIG. 1, may be provided or the cabinet 10 may be equipped with casters (not shown).

Having thus described the invention it will be realized that it is susceptible to various changes and modifications and that such changes may be made without departing from the spirit of the invention or the scope of the subjoined claim.

That which is claimed as new and is desired to be secured by United States Letters Patent is:

A sound reproduction system adapted for use in reproducing voice or instrumental presentation comprising, a cabinet, a regular polygonal-shaped cover member for said cabinet, a regular polygonal bottom member closing the bottom of said cabinet, said polygonal members having the same number of sides, rectangular side members joining said cover and bottom members to form the speaker cabinet, each of said side members having apertures therein adjacent the tops thereof for the exit of sound, a speaker mounting ring carried within said cabinet side members and below said apertures, a speaker including a speaker cone carried by said mounting ring, said mounting ring providing substantially a free passage of air between the speaker and the side panels.

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