

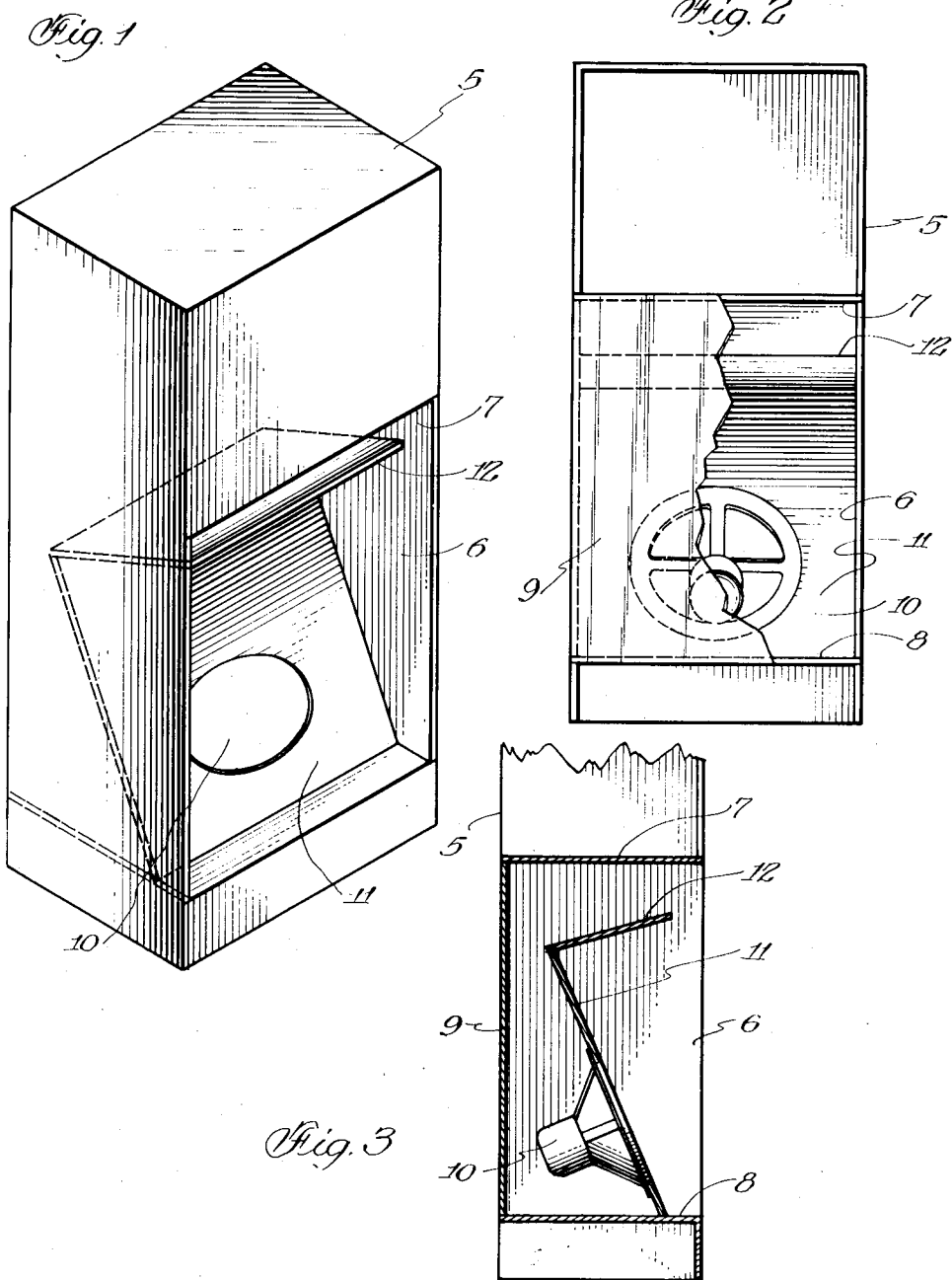
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RADIO CABINET

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## UNITED STATES PATENT OFFICE

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## RADIO CABINET

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## 1 Claim. (Cl. 181—31)

My invention relates to radio cabinets, and more particularly to the sound chambers thereof, and my main object is to so construct a sound chamber that the tone from both the front and the rear of the speaker will be projected forwardly from the cabinet.

A further object of the invention is to construct the novel sound chamber along lines of simplicity and economy.

With the above objects in view, and any others which may suggest themselves from the description to follow, a better understanding of the invention may be had by reference to the accompanying drawing in which—

Fig. 1 is a perspective view of the novel cabinet as seen from the front;

Fig. 2 is a rear view, partly broken away; and

Fig. 3 is a vertical cross-section of the sound chamber.

In considering the conventional radio, the listener assumes the sound or tone to issue fully in a forward direction from the speaker, although tests have proven that as much, or nearly as much sound issues from the rear of the speaker as well.

With a radio usually placed against a wall, it will be appreciated that the rearwardly projected sound is baffled or muffled, creating distorting and other prejudicial influences upon the sound emitted or heard from the speaker. It is for this reason that I have designed the novel sound chamber to utilize the sound rearwardly emitted and transmit the same to blend with the main sound which is forwardly emitted from the speaker.

In accordance with the foregoing, specific reference to the drawing indicates a typical radio cabinet at 5. For the purpose of my invention, the sound chamber of the cabinet is rectangular in form, having sides 6, a top 7, a bottom 8 and a back 9. The front of the sound chamber is shown open, but may be furnished with a grill, fabric or other facing for purposes of appearance or embellishment.

The radio speaker 10 is attached in the usual manner to the perforated sounding board 11 and preferably inclined in a forward direction, although it may be disposed in vertical position if desired. The sounding board 11 terminates some distance below the sound chamber top 7, and takes a forward extension 12 which has a rising course. The extension 12 terminates a short distance from the front of the sound chamber. Both the sounding board 11 and its extension 12 are of wood and glued or otherwise secured to the sides 6 of the sound chamber in order to form an integral part thereof.

With the sound chamber constituted as just described, it is seen that the sound from the speaker 10 not only has the usual forward direction of emission, but can also issue rearwardly and rise in the space behind the sounding board to be reflected in forward direction between the chamber top 7 and the sounding board extension 12, and so issue forwardly and blend with the sound projected from in front of the speaker. By so constructing the sound chamber, no baffling or distorting influences meet the rearwardly emitted sound, so that the same issues in normal condition to mingle with the frontal sound and so amplify and improve the tone of the latter. Also, due to the closed or sealed tone chamber behind the sounding board and its extension uniform reproduction is made possible, since stray sound waves do not issue from the back of the cabinet. At the same time, the novel sound chamber is constructed along lines of extreme simplicity, whereby to make it possible to manufacture the improved radio cabinet economically.

While I have described the invention along the specific lines shown, the same is susceptible of various changes and refinements, and I desire to include such changes and refinements as coming within the scope and spirit of the appended claim.

I claim:

A radio cabinet, including a top wall, a pair of side walls, a bottom wall and a back wall defining a sound chamber open at its front, a sounding board in said sound chamber spanning the side walls thereof and having its lower edge against the bottom wall of the sound chamber, said sounding board having an opening therein, a speaker mounted in said opening with the diaphragm thereof substantially spanning the opening, said sounding board being inclined rearwardly from its lower edge and having its upper edge terminating in spaced relation to said top and back walls of said sound chamber, a forward extension from the upper edge of said sounding board directed toward the open front of said sound chamber to create in conjunction with said sounding board a divider in said sound chamber and a compartment around the back of said divider for the frontal emission of sound waves from the back of said speaker, the path of said waves being first between said back wall and said sounding board and then between said forward extension and said top wall to the front of the sound chamber, the forward edge of said forward extension being closer to said top wall than the rear edge thereof.

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