

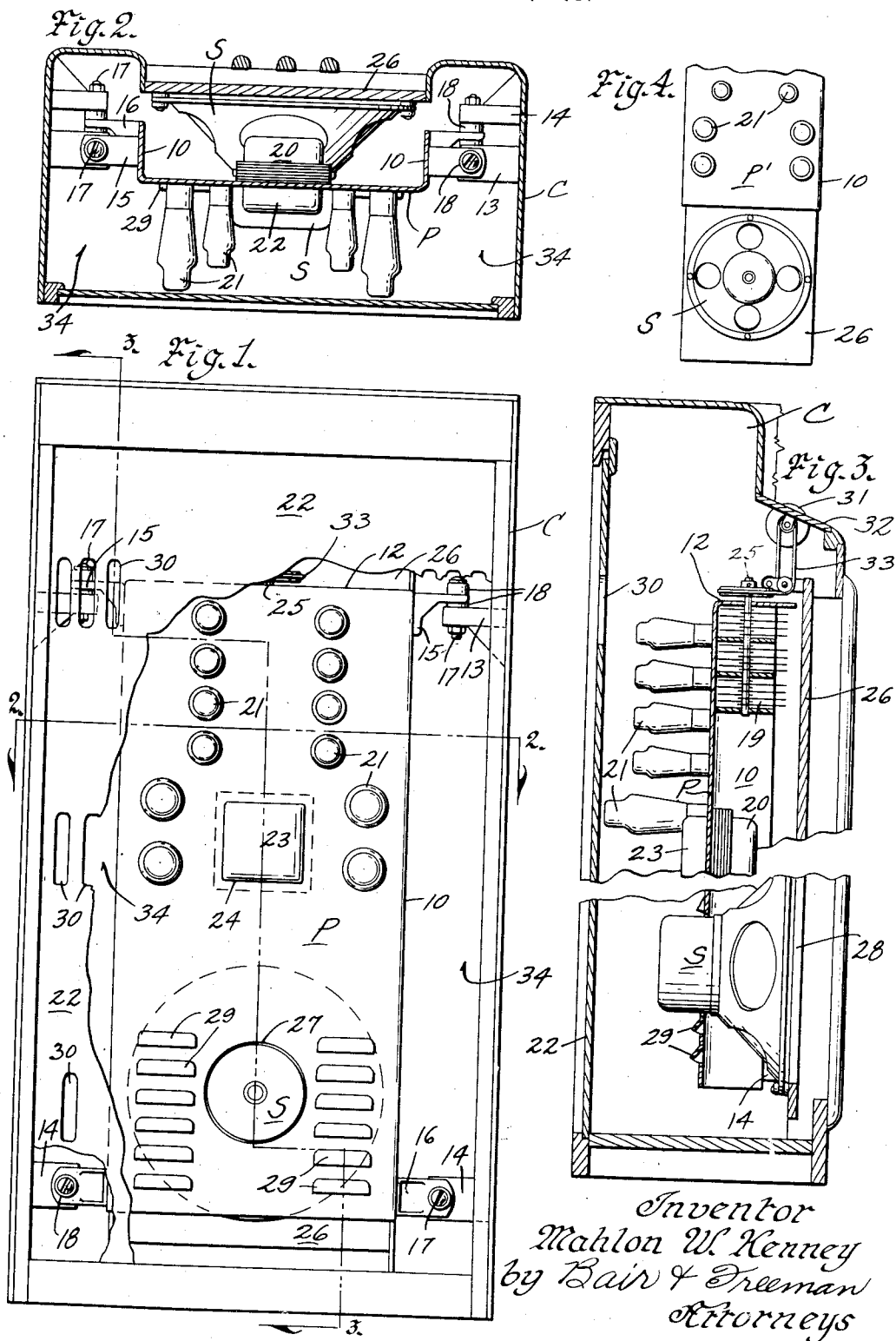
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RADIO CABINET AND APPARATUS

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RADIO CABINET AND APPARATUS

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One object of my invention is to provide a radio cabinet and apparatus in which the apparatus is mounted in a novel manner relative to the cabinet to secure several desirable results which are not obtainable by the usual arrangement of a horizontally arranged panel on which radio apparatus is mounted in the ordinary manner.

Another object is to provide a radio construction in which a panel on which the radio apparatus is mounted is arranged vertically within the cabinet and the apparatus is so arranged relative to the panel that only parts thereof to be removed and replaced, such as the radio tubes, project from an outwardly facing surface of the panel so that access can be readily had thereto, the remaining apparatus being mounted on the opposite side of the panel so that it is not readily accessible, except to a serviceman after he removes the entire panel.

A further object is to provide a panel which exposes the radio tubes and the like to ready access but substantially encloses the remaining parts of the radio apparatus so that they are protected from dust and are also electrically shielded by the panel, the panel having side flanges to supplement the panel itself as a shield for this purpose.

Still a further object is to arrange the panel in relation to a speaker so that back tones from the speaker can be controlled by the panel and emitted to the cabinet behind the panel as desired.

Still a further object is to provide an elongated radio apparatus panel arranged vertically in a radio cabinet so that space is provided in the cabinet at the sides of the panel into which the back tones of the speaker may be emitted, such spaces thereby providing sound chambers for the back tones.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a rear elevational view of a radio cabinet showing radio apparatus mounted therein and arranged in the novel manner I contemplate, a portion of the back panel or cover of the cabinet being broken away to show the apparatus.

Figure 2 is a horizontal sectional view on the line 2—2 of Figure 1.

Figure 3 is a vertical sectional view on the line 3—3 of Figure 1; and

Figure 4 is a rear elevational view of a sound board, speaker and modified form of panel.

On the accompanying drawing I have used the reference character C to indicate generally a radio cabinet. The cabinet C is illustrated as of the upright or console type. Within the cabinet C I provide a panel P for the radio apparatus. The panel P it will be noted is arranged in a vertical plane for several important reasons which will hereinafter appear.

The panel P is preferably provided with side flanges 10 and a top flange 12. The panel may be supported in any suitable manner relative to the cabinet C. By way of illustration I show supporting brackets 13 and 14 extending from the side walls of the cabinet C. Complementary supporting brackets 15 and 16 extend from the side flanges 10 of the panel P. The brackets 15 and 16 are mounted on the brackets 13 and 14 by means of bolts 17 with resilient bushings of rubber or the like 18 surrounding the bolts to minimize transmission of vibration from the cabinet to the panel.

The panel P is adapted for supporting radio apparatus which may include a variable condenser 19, a transformer 20 and radio tubes 21. These are shown merely by way of illustration as it is obvious that all the other necessary apparatus of a radio set can be also supported by the panel P. The apparatus disclosed however is supported relative to the panel in a distinctive manner. The tubes 21, it will be noted, extend from the back side of the panel and accordingly are readily accessible when the back cover 22 of the radio cabinet C is removed.

The tubes 21 are the parts of the radio apparatus normally replaced by the user of the radio. Accordingly they are the only parts of the apparatus which I mount so that they are readily accessible although other parts desirable for the user to remove might also be mounted in a similar manner. The remaining parts of the apparatus, such as the condenser 19 and the transformer 20, are mounted on the opposite or front side of the panel P, although where the space is restricted, certain covered portions of the apparatus, such as a coil cover 23 of the transformer 20, may project through the panel as illustrated. An opening 24 is provided in the panel for this purpose.

It is ordinarily not necessary to have access to certain parts of the radio apparatus, such as the condenser 19. Accordingly, it may be mount-

ed on the front of the panel P between the side flanges 10 with its operating shaft 25 projecting through the top wall 12 of the panel. In this manner the condenser is electrically shielded as well as being mechanically shielded from ready access. Of course when it is necessary for servicemen to repair or replace any parts of the radio apparatus mechanically shielded in this manner, he gains access to it in the usual way, such as by entirely removing the apparatus panel from the cabinet.

Within the cabinet C I show a sound board 26. A speaker S is mounted thereon and where the panel P projects down past the speaker, the panel may be provided with an enlarged opening 27 to receive the projecting part of the speaker. The sound board 26 is provided with an opening 28 to permit the tones from the front of the speaker to be emitted to atmosphere in front of the radio cabinet C.

The back tones from the speaker may be controlled so that they pass into the back part of the cabinet. For this purpose louvers 29, or any desired type of opening, may be provided in the panel P through which the back tones may pass in order to enter the back portion of the cabinet C. The back tones may be further controlled as to admission to the atmosphere by openings 30 selectively arranged in the cover 22 for the back of the cabinet.

As an alternative arrangement, the panel designated as P' in Figure 4 may terminate short of the speaker S thereby permitting free emission of the back tones to the cabinet behind the panel. Figure 4 also illustrates elimination of the opening 24 when the radio apparatus, except the tubes 21, is mounted entirely in front of the panel.

Mounting the panel as disclosed necessitates a mechanical arrangement to adjust the condenser 19. By way of illustration I show a control disc 31 projecting through a control board 32 of the cabinet C. By means of an arrangement of pulleys, a belt or the like 33 is used to transmit motion from the disc 31 to the shaft 25 of the condenser. The vertical arrangement of the panel P also permits space at the sides of the panel, as indicated at 34 in Figure 2, through which the back tones from the speaker S may ascend. Such space is ordinarily cut off by the usual arrangement of radio apparatus panel wherein the panel is placed on a shelf in the cabinet. Thus the vertical arrangement of the panel permits an arrangement of radio apparatus such that only the parts desirable for ready removal are accessible without the necessity of removing the panel from the cabinet. This protects the remaining parts of the radio apparatus from being tampered with and also shields it electrically as it is enclosed within the panel and its side flanges 10. Such arrangement accordingly secures a number of results without com-

plicating the construction or increasing the manufacturing expense.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. In a device of the class described, a cabinet, a radio apparatus and a panel therein, said panel being arranged vertically, replaceable parts of said apparatus being mounted on said panel to project horizontally outward therefrom and other parts of said radio apparatus mounted on said panel in position to be mechanically shielded from ready access thereto, said radio apparatus including a speaker mounted in said cabinet in front of said panel, an extension of said panel over the rear of said speaker preventing ready access thereto, said extension having an opening therein permitting back tones of the speaker to enter the back part of said cabinet.

2. In a device of the class described, a cabinet, a panel therein, said panel being arranged vertically, radio apparatus mounted on said panel, a speaker mounted in said cabinet in front of said panel, an extension of said panel over the rear of said speaker preventing ready access thereto, said extension having an opening therein permitting back tones of the speaker to enter the back part of said cabinet.

3. In a device of the class described, a cabinet, radio apparatus, an elongated panel supporting said radio apparatus in said cabinet, said panel being arranged vertically, a speaker mounted in said cabinet in front of said panel, flanges on said panel substantially enclosing the sides of said speaker, said panel having an opening therein permitting back tones of the speaker to enter the back part of said cabinet, the sides of said panel terminating short of the sides of said cabinet.

4. In a device of the class described, a cabinet, a vertical sound board forming the front thereof, an opening in said sound board, a loud-speaker mounted in said opening, a vertical metallic panel member mounted in said cabinet substantially parallel to and spaced from said sound board, said panel extending over said loud-speaker to prevent ready access thereto, radio apparatus supported by said panel, radio tubes of said apparatus projecting horizontally and rearwardly from said panel member, the remaining parts of the radio apparatus being mounted on the opposite side of said panel to prevent ready access thereto and side flanges extending forwardly from said panel member and serving to shield the said remaining parts of said radio apparatus.

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