March 28, 1950 C. A. PETERSON 2,501,689

RADIO CABINET

Filed April 14, 1945 2 Sheets-Sheet 1

Fig. 1

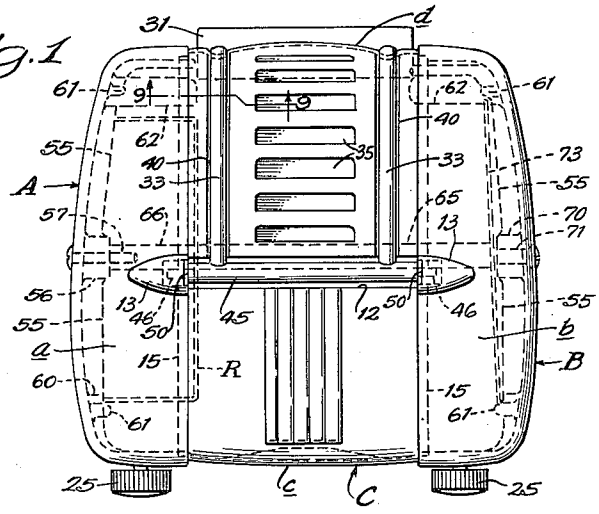


Fig. 2

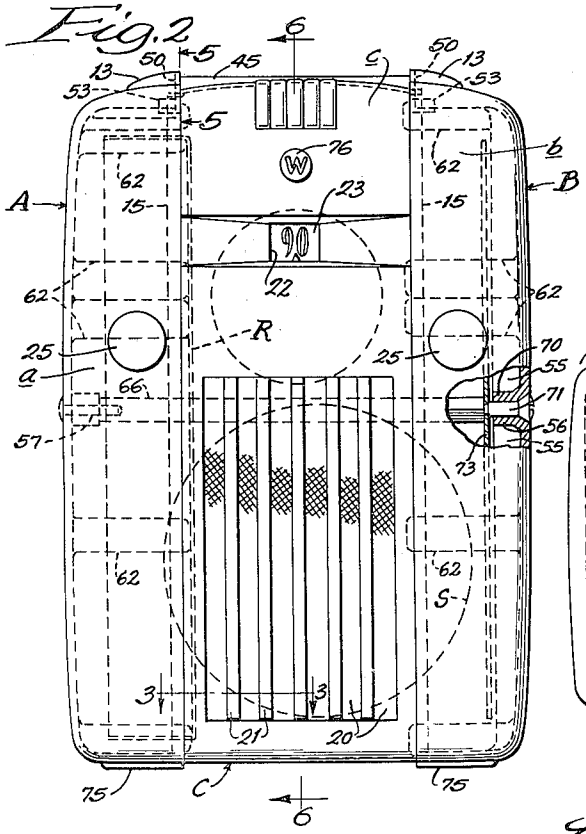


Fig. 3

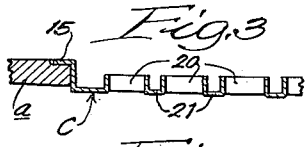


Fig. 4

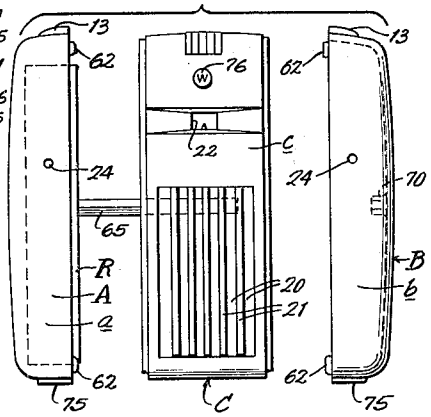
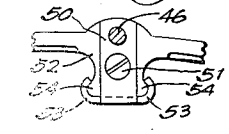


Fig. 5



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Fig. 6

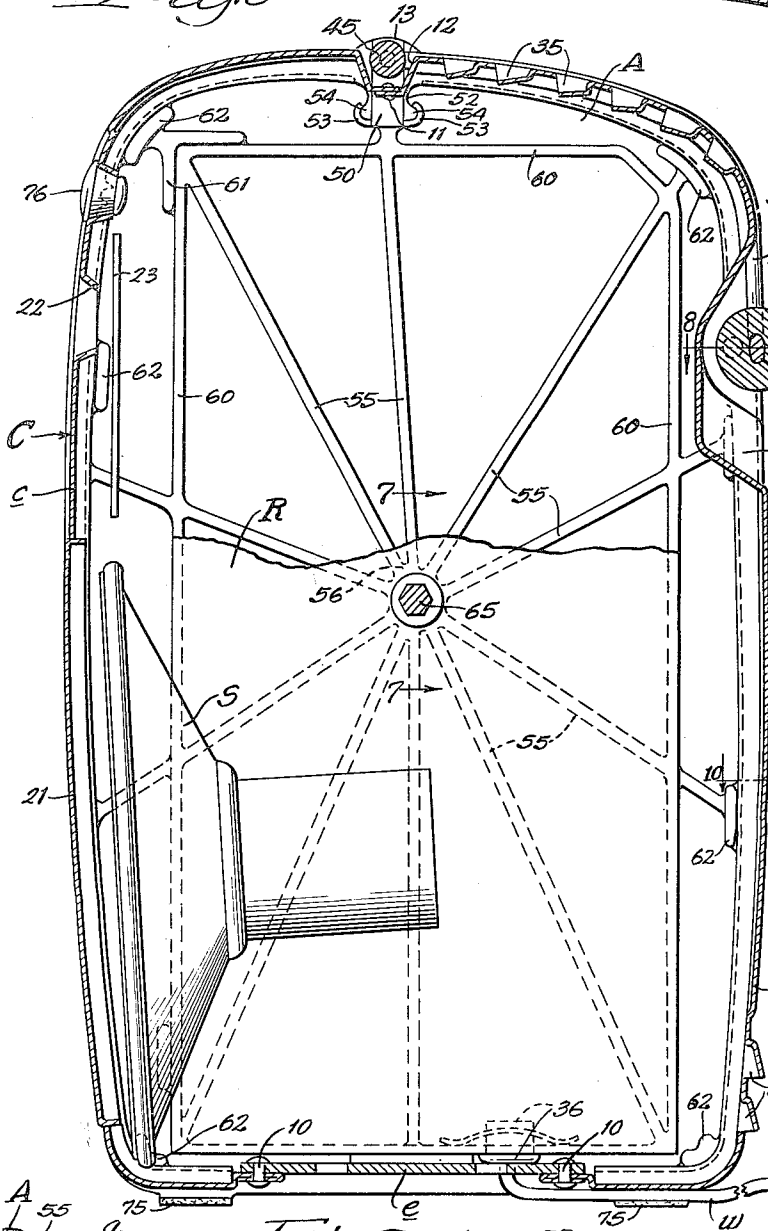


Fig. 8

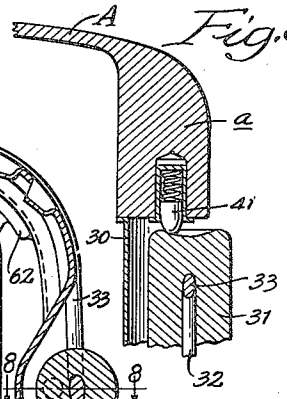


Fig. 9

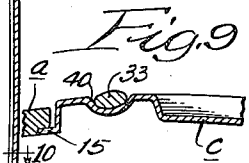


Fig. 10

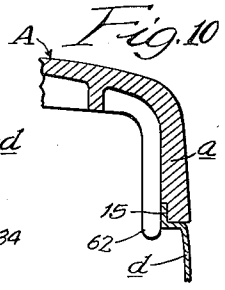
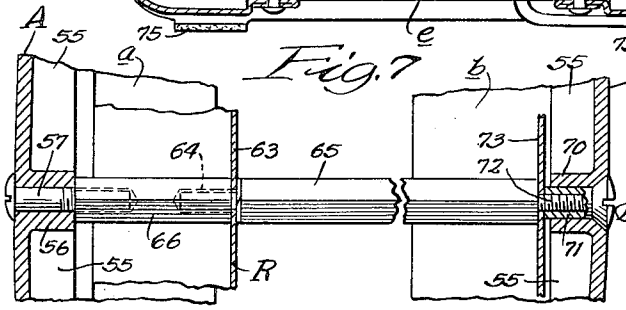


Fig. 7



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UNITED STATES PATENT OFFICE

2,501,689

RADIO CABINET

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Application April 14, 1945, Serial No. 588,325

7 Claims. (Cl. 312—7)

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This invention is concerned with a cabinet for a radio receiving set. Primarily the cabinet is adapted for the accommodation of a small compact set that is easily portable. For its objects the cabinet aims to combine, with an unusual degree of eye appeal, certain mechanical advantages, such as the use of plural sections which are securely connected together to provide a protecting enclosure for the receiving set therewithin, and which may be conveniently disconnected, when occasion requires, to permit separation of one section from another whereby to afford ample and ready access to the interior of the cabinet. Facile installation or removal of the receiving set within or from the cabinet is also an objective that is attained by the novel features of construction herein to be disclosed.

By using one material for one cabinet section, and a different material for another, it is possible to combine certain specially advantageous properties of each in the completed cabinet. For example, as herein illustrated, the cabinet may comprise a center section of sheet metal which, by a stamping operation or otherwise, is formed with a speaker grille, dial opening, ornamental ribs or beads, ventilating louvers, etc., this center section being extended around to provide a front, top, back and part bottom; and in combination with such a center section, a pair of sides (or ends) which may be conveniently produced from some appropriate plastic composition, one of the sides which affords a vertical mounting for the chassis of the receiving set being joined to the opposite side and cooperating therewith to secure the center section immovably in place. Each cabinet side is, by preference, flanged along the front, top, rear and bottom, whereby it is interiorly recessed to communicate with the space within the center section and complete the protecting enclosure for the receiving set which is affixed in place therewithin.

Also with such a cabinet I may provide a bail which is mounted to remain down out of the way when not needed, but to be swung upwardly to a convenient carrying position whenever it is desired to transport the cabinet from one place to another, the bail being attached to the cabinet sides at points adjacent the tops thereof in a manner which is both sturdy and secure. A cabinet which incorporates these various features of construction may depart from the usual designs which have prevailed in small portable sets to provide a longest dimension which is vertical whereby to minimize the table or mantel area required for accommodation of the cabinet. In

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the design of the present cabinet greater latitude is afforded for the embodiment of original and artistic eye-appealing concepts, both in the center section and in the sides, because in the production thereof each is a separate entity and is fashioned independently of the others. All these special and unusual points of interest and advantages will fully appear hereinafter from the succeeding description and accompanying drawings which illustrate a suggestive embodiment of my invention in the manner following:

Fig. 1 is a top plan view of the cabinet;

Fig. 2 is a front elevation thereof:

Fig. 3 is an enlarged detail in section, taken on the line 3—3 of Fig. 2;

Fig. 4 which is a front elevation of the cabinet (on a scale smaller than in Fig. 2) shows the center section separated from the two sides in a position these parts would occupy in the process of being assembled;

Fig. 5 is a detail in vertical section, taken on line 5—5 of Fig. 2;

Fig. 6 is a vertical section through the cabinet, taken on line 6—6 of Fig. 2;

Fig. 7 is a detail in section, taken on line 7—7 of Fig. 6;

Fig. 8 is a detail in section, taken on line 8—8 of Fig. 6;

Fig. 9 is a detail in section, taken on line 9—9 of Fig. 1; and

Fig. 10 is a detail in section, taken on line 10—10 of Fig. 6.

The cabinet comprises two sides A and B, desirably of plastic material, having flanged walls *a* and *b*, respectively, which extend toward each other whereby to provide confronting interior recesses. Also, between the two sides, when spaced apart for the purpose, is interposed an interfitting center section C comprising front and back walls *c* and *d*, respectively, both extending the full cabinet height and then toward each other to form a center top and partial bottom for the cabinet. As shown, the cabinet height exceeds its other dimensions, and because of this circumstance certain special features have been incorporated in its construction, as will later appear.

At the bottom the center section front and back walls are separated by a gap which is bridged by a ventilating strip *e* of insulating material, such as bakelite, rivets 10 or other suitable devices connecting this strip thereto. At the top the front and back walls of the center section are connected directly to eath other, as by rivets 11 which extend through overlapping edges at the bottom of a transverse channel 12 formed

by suitable bends in the material for this purpose. This channel extends transversely across the top opposite a pair of bosses 13 formed on the side sections A and B, each boss being provided with a socket which faces the other. As shown best in Figs. 3 and 4, the center section is formed with an out-turned marginal lip 15 for engagement within marginal shoulders of the side flanges whereby to provide a continuous interfit between the several cabinet sections. At its point of juncture with the sides the center section is desirably inset slightly for appearance sake (see Figs. 1 and 2).

The center front wall c may be formed with a plurality of parallel openings 20 separated by channel bars 21 to give the impression of depth, whereby to provide an ornamental grille to the rear of which may be supported a fabric sheet (not shown), in accordance with usual practice. The speaker S, forming part of the receiving set, is located to the rear of the grille (see Fig. 6). Also an opening 22 is formed through this front wall to expose a movable dial 23 upon its rear face, or to accommodate a movable pointer shaft if a stationary dial is to be displayed visibly upon the front face of the cabinet. Through the flanged walls of the sides I may also provide openings 24 through which control shafts are extended from a radio receiving set within the cabinet interior to the exterior thereof for operation by knobs 25 which are mounted at the shaft extremities.

The center back wall d near its upper end is transversely inset at 30 to provide a recess wherein may be accommodated wholly or partially a handle 31 which conveniently may be formed around a wire 32 having parallel end extensions 33. This wire constitutes a bail concerning which further details will be given later. The center back wall d may be provided with a plurality of ventilating openings 34, and similar openings 35 are provided at the top. At the cabinet bottom is a thimble 36 through which are extended wires w forming the electrical connection between the receiving set within the cabinet and a source of current to the outside thereof.

The bail wire extensions are desirably of oval cross section (see Fig. 9) with horizontal major axes thereby adapting them better for reception within shallow branch channels 40 which are formed in the center section top. The bail handle 31 may be formed at one or both ends with a concavity (see Fig. 8) for releasable engagement by a spring detent 41, here shown as a bullet catch, whereby the bail will normally be held at its down position upon the cabinet top with which it harmonizes inconspicuously. Opposite the handle is a shaft or rod 45 to which the wire extensions of the bail are joined, this shaft extending across the cabinet top to occupy a position partially or wholly within the transverse channel 12, and being of reduced diameter at its ends to form a pair of trunnions 46. Bearings for these trunnions are provided by the bosses 13 which are protruded only slightly above the top surface of the cabinet top, one upon each cabinet side. Each boss socket may receive one trunnion which is extended through a bearing fitting 50 to be supported thereby, each such fitting being affixed, as by a screw 51, to a lug 52 which depends from the top of the cabinet side, preferably integral therewith, and being further interlocked with this lug as by a pair of arms 53 in underlying embracing relation with shoulders 54 which are extended oppositely therefrom. By such a mounting for the bail, the cabinet may be suspended for portability, the load at the cabinet top being distributed through a region which is reinforced both by added thickness and by the bearing fittings which engage with the underside of the depending lugs.

The cabinet interior is specially constructed to facilitate interconnection of the two sides and intervening center section, also to provide a vertical mounting for the receiving set within one of the cabinet sides. For this purpose the flanged walls a and b of the sides are properly proportioned and spaced, and also reinforced as by ribs 55 (see Fig. 6) some of which converge toward a hub 56 through which is an opening to receive the threaded shank 57 of a screw whose head is adapted to engage the exterior face of the side A. Certain reinforcing ribs 60 define a rectangle having adjacent one or more corners an angle rest 61 within which may be fitted one corner of the chassis R of the radio receiving set. Locating bosses 62 are also extended inwardly at spaced points to facilitate positioning of the center section C with respect to the side section when assembly takes place. The chassis comprises a plate 63 forming a platform through which is an opening to receive the threaded stud 64 extending from one end of a tie bar 65, here shown as of hexagonal cross section. In threaded connection with the stud 64 is a hollow post 66 extending from the chassis platform to the hub 56 for threaded connection with the screw shank 57. By some such means as this—the tie bar 65, post 66 and screw shank 57—the chassis may be securely mounted in a fixed vertical position upon the seat provided by the ribs within the cabinet side A.

The tie bar extends crosswise within the cabinet to a second hub 70 formed interiorly of the other cabinet side B. Within the axial opening of this hub is secured the hollow interiorly threaded shank 71 of a screw whose head is adapted to engage the exterior face of the side B. The proximate end of the tie bar is formed with a threaded stud 72 which enters the hollow screw for engagement thereby, and mounted upon this stud at the end of the screw is an antenna 73, which becomes clamped immovably in place when the screw shank is rotatively adjusted for this purpose.

From the foregoing description it will be observed that my plural-section cabinet is possessed of special advantages. The sides, which may conveniently be produced of plastic material by a molding operation, will not require any exterior finish. One side may be formed to provide internally a reenforced seat for the chassis which is to be supported in a vertical position, and exteriorly both sides may be provided at the bottom with feet 75 whereon to stand the cabinet. The center section, made desirably of sheet-metal which is die-stamped and formed to shape, may have incorporated therein, without any additional operation, such features as ventilating louvers, grille and dial openings, also an opening in which may be seated a medallion button 76. Any selected finish may be applied to such a center section.

Accessibility to the cabinet interior is also a noteworthy feature. This requires merely that one side be disconnected from the tie rod whereupon it is free to be removed. The entire chassis, together with all the parts mounted thereon, is then exposed for inspection. To remove the chas-

sis in its entirety requires only that the remaining side be disconnected from the post. The tie rod and post may constitute the sole interconnection between the two sides and the center section which is fitted in place therebetween.

The swinging bail by which the cabinet may be suspended for carrying purposes is so designed as to serve in an ornamental capacity. In normal use, when the cabinet is supported upon a shelf, table or mantel, its rear side is not exposed to view. The bail handle, which then is in down position, remains out of sight. All that remains in view are the two wires **33** and the shaft **45** to which they are connected, these parts being accommodated within the transverse and branch channels provided for this purpose in the top of the cabinet. The louvers between the wires **33** may also be fit into the scheme of ornamentation, so that the utility aspects of these several parts are subordinated.

When the bail is swung up to suspend the cabinet therefrom, the connection with the cabinet top is reenforced adequately at that point by the extra thickness of material which forms depending lugs, and by the bearing fittings which engage therewith in the bottom region of the lugs. There is accordingly a safe distribution of the forces which otherwise might tend to produce a disruption of the plastic material forming the top of the cabinet at its sides.

I claim:

1. A radio cabinet comprising a pair of spaced walls having flanges forming confronting interior recesses, one of said walls being adapted to afford a vertical mounting for a receiving set, an interfitting center section forming with said walls an enclosure and composed of a top wall and front and back walls extending downwardly from the top wall to the bottom of the cabinet, a pair of facing sockets, one formed in each spaced cabinet wall at its top, and a bail arranged exteriorly of the cabinet and having outturned trunnions, one receivable within each socket when the spaced cabinet walls are secured together, said bail extending over the top and downwardly therefrom and providing a swinging lifting handle for the cabinet.

2. A radio cabinet comprising a pair of spaced walls having flanges forming confronting interior recesses, one of said walls being adapted to afford a vertical mounting for a receiving set, an interfitting center section forming with said walls an enclosure and composed of a top wall and front and back walls extending downwardly from the top wall to the bottom of the cabinet, a pair of facing sockets, one formed in each of said spaced cabinet walls at its top, a bail arranged exteriorly of the cabinet and having outturned trunnions, one receivable within each socket when the spaced cabinet walls are secured together, said bail extending over the top and downwardly therefrom and providing a swinging lifting handle for the cabinet, and a fitting providing a bearing for each trunnion secured to each of said spaced cabinet walls adjacent the socket for sustaining the cabinet load when supported by the bail.

3. A radio cabinet comprising a pair of spaced walls having flanges forming confronting interior recesses, one of said walls being adapted to afford a vertical mounting for a receiving set, an interfitting center section forming with said walls an enclosure and composed of a top wall and front and back walls extending downwardly from the top wall to the bottom of the cabinet, said

center section being provided at the back with a recess and having spaced branch channels extending upwardly from the recess to the top of the cabinet and partially across the top thereof, said center section being provided at the top adjacent the upper terminals of the channels with a transverse channel, a pair of facing sockets, one formed in each of said spaced cabinet walls adjacent the ends of the transverse channel and a bail comprising a shaft having trunnions located in said sockets, two arms joined to the shaft and receivable within the branch channels and extending along the same to said recess, and a handle interconnecting the arms at their rear ends and receivable within said recess and adapted to provide a swinging lifting handle for the cabinet.

4. A radio cabinet comprising a pair of spaced walls having flanges forming confronting interior recesses, one of said walls being adapted to afford a vertical mounting for a receiving set, an interfitting center section forming with said walls an enclosure and composed of a top wall and front and back walls extending downwardly from the top wall to the bottom of the cabinet, said center section being provided at the back with a recess and having spaced branch channels extending upwardly from the recess to the top of the cabinet and partially across the top thereof, said center section being provided at the top adjacent the upper terminals of the channels with a transverse channel, a pair of facing sockets, one formed in each of said spaced cabinet walls adjacent the ends of the transverse channel, a bail comprising a shaft arranged in the transverse channel and having trunnions located in said sockets, two arms joined to the shaft and receivable within the branch channels and extending along the same to said recess, and a handle interconnecting the arms at their rear ends and receivable within said recess and adapted to provide a swinging lifting handle for the cabinet, and a detent located at said socket and arranged to engage said handle to retain the same in the socket.

5. A radio cabinet comprising a pair of spaced vertical sides, one of the sides affording a support for a receiving set, an interfitting central section arranged between said sides and forming with the same an enclosure, and transverse fastening means connecting said vertical sides and releasably securing the same and the central section together, said transverse fastening means extending through the chassis of the receiving set and composed of separable sections having a clamping engagement with said chassis, whereby the receiving set is secured in a fixed vertical position to one of the sides of the cabinet.

6. A radio cabinet comprising a pair of spaced vertical sides having flanges forming confronting interior recesses, one of the sides affording a mounting for a receiving set, an interfitting central section arranged between said sides and forming with the same an enclosure, a pair of facing sockets carried by the sides of the cabinet, a handle arranged between said sockets and having portions fitting within the same, whereby the handle is interlocked with the sides of the cabinet, and transverse fastening means connecting the sides of the cabinet and releasably securing the two cabinet sides and the central section together and maintaining said handle in detachable interlocked relation with the sides of the cabinet.

7. A radio cabinet comprising a pair of spaced

vertical sides having flanges forming confronting interior recesses, one of the sides affording a mounting for a receiving set, an interfitting central section arranged between said sides and forming with the same an enclosure, a pair of facing sockets carried by the sides of the cabinet, a handle arranged between said sockets and having portions fitting within the same, whereby the handle is interlocked with the sides of the cabinet, and transverse fastening means connecting the sides of the cabinet and releasably securing the same and the central section together, and extending through the chassis of the receiving set and having a clamping engagement with the same, whereby the receiving set is secured in a fixed position to one of the sides of the cabinet, said transverse fastening means also releasably maintaining the handle in interlocked relation with the sides of the cabinet.

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