

July 14, 1925.

1,546,004

E. W. BIRRY

SECTIONAL CABINET FOR RADIO APPARATUS

Filed May 1, 1924

2 Sheets-Sheet 1

FIG. 1

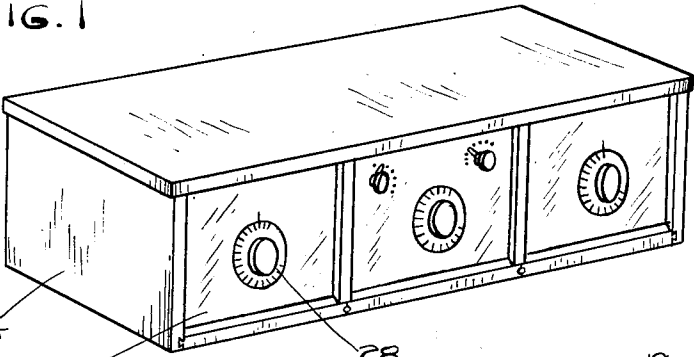


FIG. 5

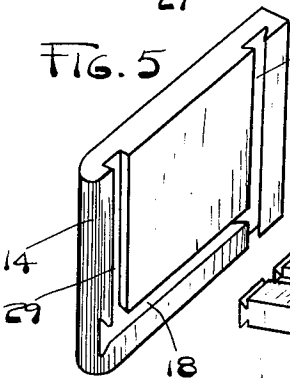


FIG. 6

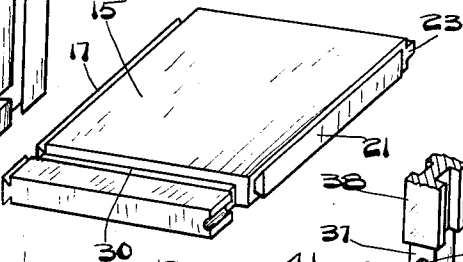


FIG. 7

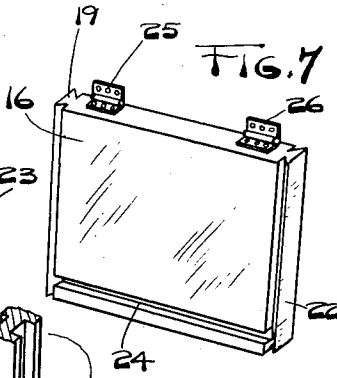


FIG. 2

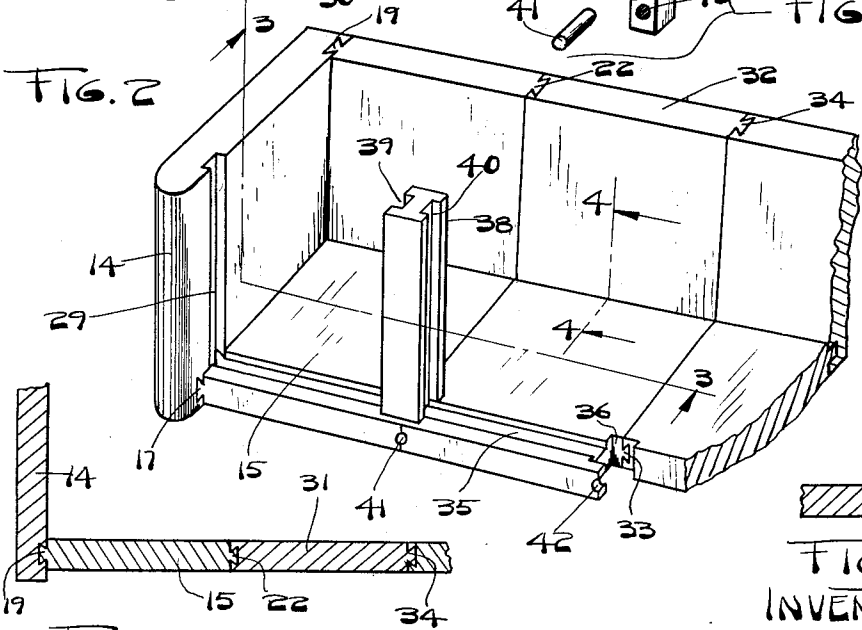


FIG. 4
INVENTOR

FIG. 3

Elmer W Birry

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FIG. 9

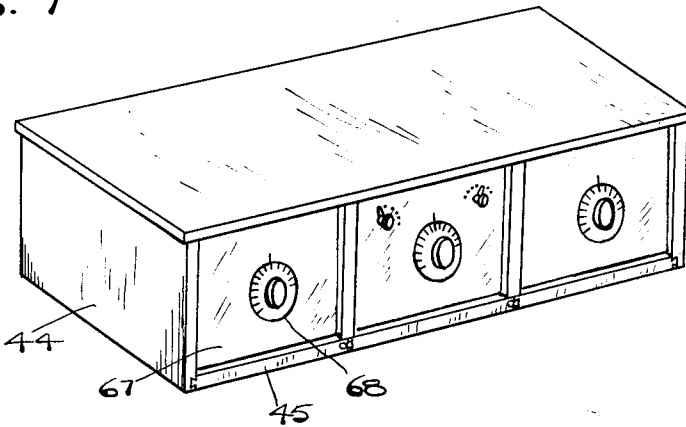


FIG. 10

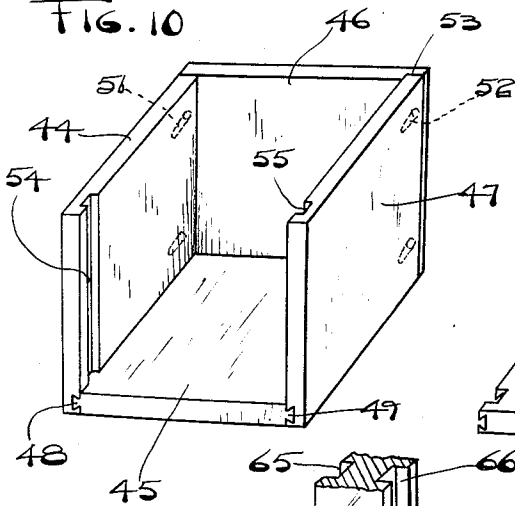


FIG. 12

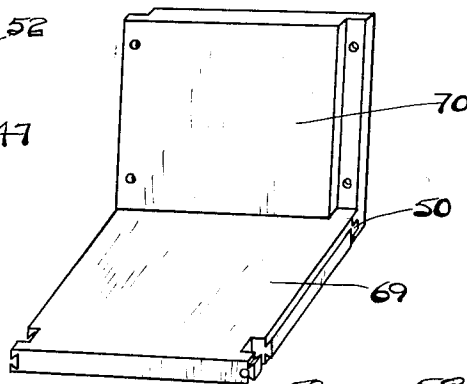


FIG. 13

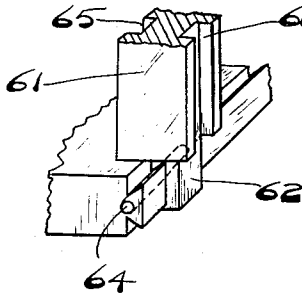
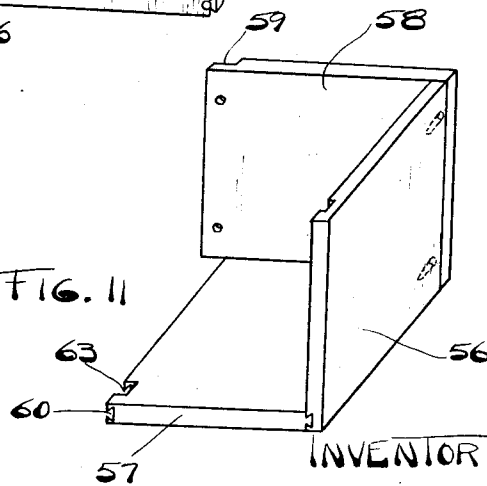


FIG. 11



INVENTOR

Elmer W Birry

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UNITED STATES PATENT OFFICE.

ELMER W. BIRRY, OF NORWOOD, OHIO.

SECTIONAL CABINET FOR RADIO APPARATUS.

Application filed May 1, 1924. Serial No. 710,472.

To all whom it may concern:

Be it known that I, ELMER W. BIRRY, a citizen of the United States, residing in Norwood, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in a Sectional Cabinet for Radio Apparatus, of which the following is a specification.

In the present rapid development of the radio industry it has become quite the vogue for amateurs and experimenters to construct their own radio apparatus. In the construction of receiving sets there are employed a number of units. The principal unit of any set consists of a detector and usually has embodied therewith one or more stages of audio or radio amplification or both. The average amateur begins the construction of a receiving set by providing a detector unit and then adds a stage of audio amplification or a stage of radio amplification in accordance with the finances he has at hand available for increasing the scope of his receiving instrument, both as to range and volume. In starting out with but a detector unit it is preferable that the unit be enclosed in a cabinet of suitable size and design.

An object of my invention is to produce a sectional cabinet construction for radio purposes, in which the cabinet sections can be added from time to time to expand the set in order that each additional unit of the radio receiver apparatus may be accommodated as it is added to the set.

A further object is to produce a sectional cabinet for containing radio apparatus, which will assist the experimenter in permitting him to utilize previously used cabinet sections by merely adding thereto additional sections as he adds to the apparatus of his receiving set, thereby aiding him in saving upon the additional expense involved in having to provide increased cabinet facilities each time he adds a unit of apparatus to his set.

These and other objects are attained in the sectional cabinet construction described in the following specification and illustrated in the accompanying drawings in which:

Fig. 1 is a perspective view of a radio cabinet embodying a three unit radio apparatus.

Fig. 2 is a fragmental perspective view, upon an enlarged scale, of the radio cabinet

shown in Fig. 1, certain parts having been removed for convenience of illustration.

Fig. 3 is a fragmental longitudinal sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a fragmental transverse sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is a somewhat enlarged perspective view of an end board of the cabinet embodying my invention.

Fig. 6 is a view similar to Fig. 5, but showing the bottom board section of the cabinet embodying my invention.

Fig. 7 is a view similar to Figs. 5 and 6, but showing the back board section of the cabinet embodying my invention.

Fig. 8 is a composite perspective sectional view of a detail of my invention.

Fig. 9 is a perspective view of a three unit cabinet embodying my invention.

Fig. 10 is a perspective view, upon an enlarged scale, of my improved cabinet adapted to single unit construction.

Fig. 11 is a perspective view of an end portion of my improved cabinet, adapting it to a two unit construction.

Fig. 12 is a perspective view of a middle portion of my improved cabinet, whereby it may be adapted to a three unit construction.

Fig. 13 is a fragmental perspective view upon an enlarged scale, of a detail of my improved cabinet.

The preferred form of construction which I have shown in Figs. 1 to 8 inclusive, embodies a series of units, among which are an end section 14, a bottom section 15 and a back section 16. In order that the bottom section 15 may be fitted to the end section 14, I have provided a dove-tailed key 17 which fits a correspondingly shaped groove 18 in the end 14. The back 16 is attached to the end 14 by means of a dove-tail key 19 which fits a correspondingly shaped groove 20 adjacent to the rear edge of end section 14. I will designate bottom section 15 as the primary bottom section and back section 16 as the primary back section. These primary sections 15 and 16 are provided with the respective dove-tail keys 21 and 22. This is so that another end section 14 may be provided opposite the first section. It will be seen that bottom section 15 is provided with a tongue 23 which fits a correspondingly shaped groove 24 in the back section 16 so that the bottom may be reinforced and warpage thereof prevented. It

will also be seen that the two end sections will have to be made left and right. Thus with the two ends, the bottom and the back it is but necessary to provide a plain lid or
 5 cover to close the top of the cabinet. This lid may be attached to the back 16 by means of hinges 25 and 26 if desired. It is usual to construct radio receivers with front
 10 panels 27 upon which are mounted the controlling devices 28. It is my intention to construct my improved cabinet with sectional panels as well as other sectional elements, and, to accommodate such panels I have formed the end and bottom sections
 15 with panel receiving grooves 29 and 30 respectively. This adds to the finish and workmanlike appearance of the completed set.

When it is desired to add another unit
 20 to the radio receiving apparatus, I have provided that the cabinet may be extended by adding thereto additional sections which are especially designed for such purpose. An added section of bottom
 25 board 31 is provided and the back board is increased by an added section 32. Both the sections 31 and 32 are provided with grooves adapted to receive the dove-tailed keys 21 and 22 of the sections 15 and
 30 16, the opposite edges of the sections 31 and 32 being provided with keys 33 and 34 in order that the end board which was removed from sections 15 and 16 may be fitted onto the end keys 33 and 34 of sections 31 and 32.
 35 The added bottom section 31 is provided with a groove 35 which is adapted to receive the lower edge of an added instrument panel 27. Between bottom sections 15 and 31 I have provided a squared aperture 36
 40 for the reception of the square end 37 of a post 38 which separates adjacent panel sections 27. This post is provided with grooves 39 and 40 which cooperate with grooves 29, 30 and 35 in receiving the edges of the panels.
 45 In order to secure the post in its mounting aperture 36 I provide a dowel pin 41 which fits half apertures 42 in the adjacent base board sections of the cabinet and enters a receiving aperture 43 in the squared end 37
 50 of the post. In such a two unit cabinet construction it is but necessary to increase the size of the lid and I have provided that this be done by exchanging the single unit lid for a double unit lid to be obtained at the store
 55 which carries a supply of these cabinet sections, a slight additional payment being required for the increased size of lid. Each time an additional unit is to be added to the receiver it is but necessary to increase its size by adding a bottom section 31, a back section 32 and a post 38. Whenever the cabinet is increased in length it is necessary to increase the size of the lid which covers it. This is accomplished by exchanging the
 60 previous size of lid for the next larger size

by the addition of a smaller increased payment.

In Figs. 9 to 13 inclusive I have shown my improved cabinet with a modified form of construction embodied therein. The form I have shown in Fig. 10 is for a single unit cabinet and consists of an end section 44 having attached thereto a bottom section 45, a back section 46 and an opposite end section 47. End 44 is secured to bottom 45 by means of a dove-tail key 48 and end 47 is secured to the bottom in the same manner by means of a dove-tail key 49. The rear edge of bottom 45 is provided with a tongue 50 which fits a correspondingly shaped groove in the bottom of back 46. The back 46 is secured at its edges to ends 44 and 47 by means of dowels 51 and 52. The distinction between end 44 and end 47 is that the end 47 is continued rearwardly far enough to occupy the half notched edge 53 of back section 46, thus making end 47 slightly longer than end 44. In this construction it will also be seen that I have provided panel grooves 54 and 55 only in the ends 44 and 47 and not in bottom 45. This obviously provides for a somewhat cheapened cabinet construction, as does also half notching of the back board section.

As in the previously described construction I have provided for increasing the size of the cabinet by adding thereto a series of sections 56, 57 and 58, (see Fig. 11,) which are adapted to complete the opposite end of the cabinet. The free end of back section 58 is half notched at 59 to fit the half notch back section 46 so that the cabinet may be continuous and bottom section 57 is provided with a dove tailed groove 60 to fit the dove-tail key 49 of bottom 45. As in the previous construction I have provided a post 61 which has a square end 62 designed to fit the rectangular half notches 63 of adjacent bottom sections, a dowel 64 being provided to hold the post in position. This post is provided with opposite grooves 65 and 66 to cooperate with grooves 54 and 55 in the end sections for supporting the panel 67 which carry the controlling devices 68 of the set.

To increase the size of the cabinet from two to a three or more unit construction I have provided for the addition of an intermediate bottom section 69 and an intermediate back section 70, these sections being provided with the necessary dove-tail key and groove as well as half notch joint formations, so that, it may be placed between the opposite ends of the two unit size of cabinet construction. It will be observed that in changing from a single unit size to a double unit size it is necessary to discard end 47 as well as the single unit size of lid. As in the previously described form of my invention, this is done and a double or other increased size of lid is substituted therefor.

It may be readily observed and understood that my improved cabinet construction is susceptible by means of additional central units to expand or increase the size of the cabinet. The lid in each instance of increase of size to be expanded to fit accordingly.

Having thus described my invention what I claim is:

1. A sectional cabinet for radio receivers, comprising a base board, end boards, a front board, a back board, a cover, means adapted detachably to unite the base board, end boards, front board, back board and cover, and additional sections arranged for insertion adjacent to the first mentioned sections to expand the length of the cabinet, said means being adapted detachably to unite said first mentioned and additional sections, detachable posts and means for locking the posts, base boards, and end boards.

2. A sectional cabinet for radio receivers, comprising a bottom section, end sections, a front section, a back section, a cover, said sections having tongues or grooves formed thereon, adapted detachably to unite the sections in a locked position, and additional sections for insertion adjacent to the first mentioned sections, but using the one end section thereof to form the end of the added sections, and added length of cover to lengthen the cabinet, posts grooved longitudinally

thereof with rectangular dowels at their base, rectangular apertures contained in the intersections of the boards forming the bottom sections and means for locking unitedly the posts and bottom sections and end sections, said additional sections having tongues or grooves formed thereon, adapted detachably to unite the first mentioned and additional sections thereof.

3. A sectional cabinet for radio receivers, comprising a bottom section, end sections, a front section, a back section, a cover, tongues or grooves formed upon the sections and adapted detachably to unite the sections, and means for locking the united sections, and additional sections and posts arranged for insertion adjacent to the first mentioned sections in order to increase the size of the cabinet, said additional posts and sections having tongues or grooves formed thereon to fit and unite these sections with those of the first mentioned sections, others of said sections having dowels adapted to lock and unite them with the remaining of said sections.

In witness whereof, I affix my signature in the presence of two witnesses.

ELMER W. BIRRY.

Witnesses:

H. E. BIRRY,
MATHEW P. BEDEL.