Mar. 3, 1925.

1,528,473

J. B. EDWARDS

CABINET

Filed Feb. 19, 1923 3 Sheets-Sheet 1

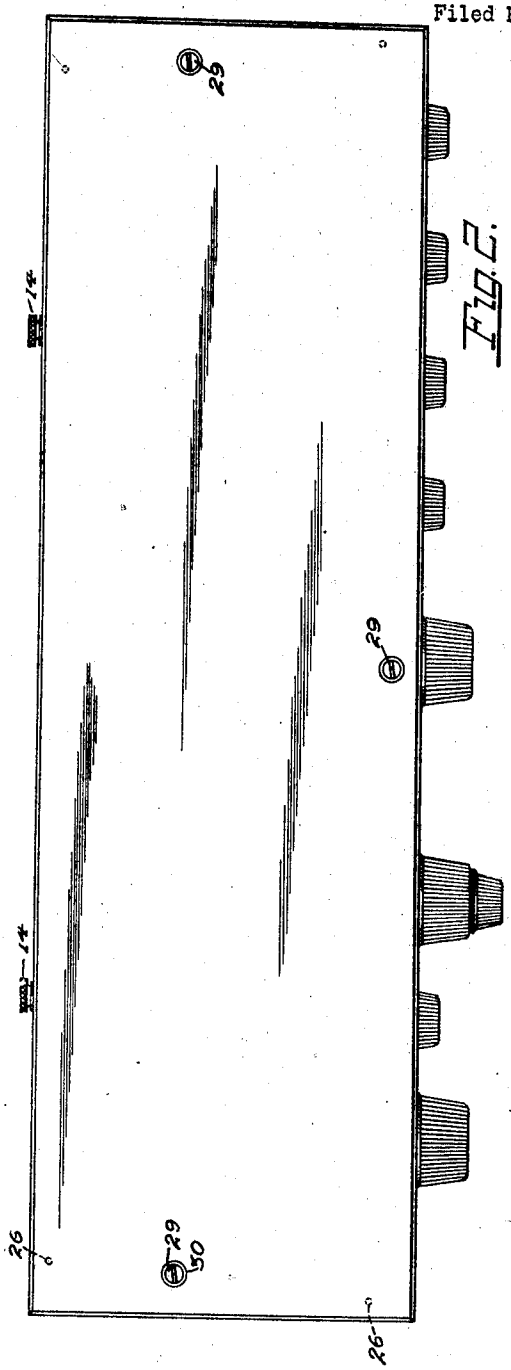


Fig. 2.

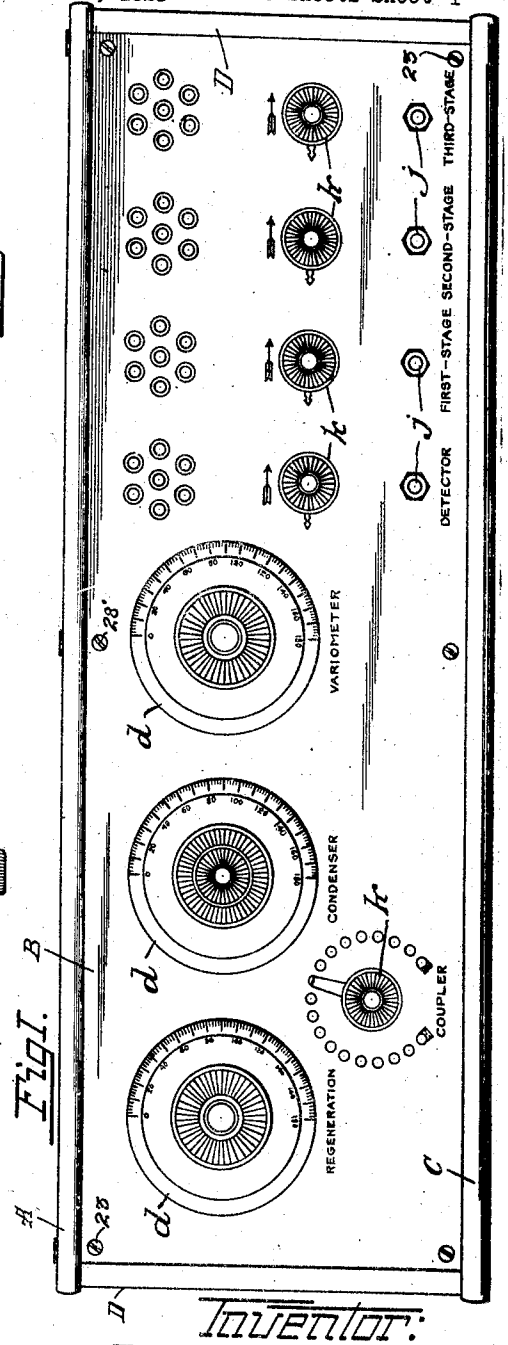


Fig. 1.

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CABINET

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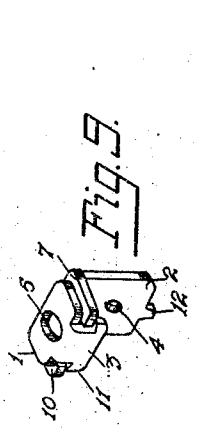


Fig. 9.

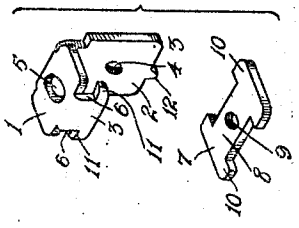


Fig. 10.

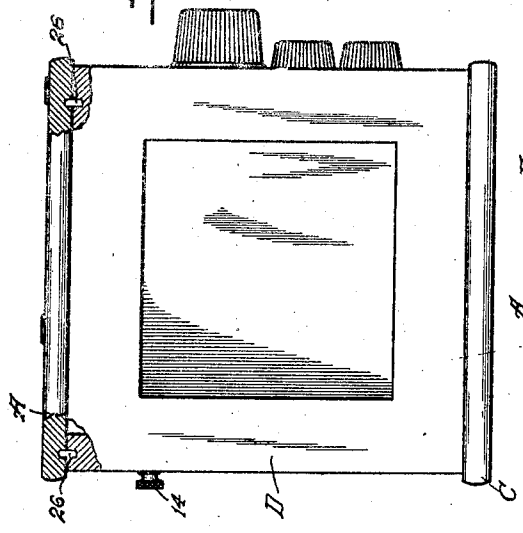


Fig. 4.

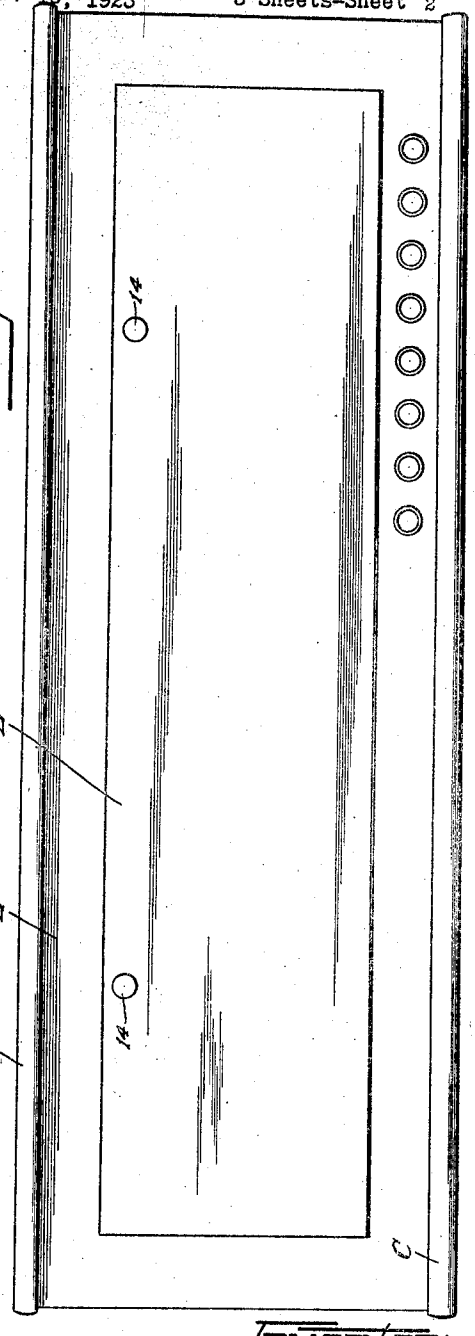


Fig. 3.

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CABINET

Filed Feb. 19, 1923

3 Sheets-Sheet 3

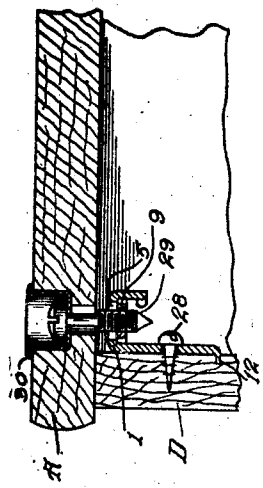
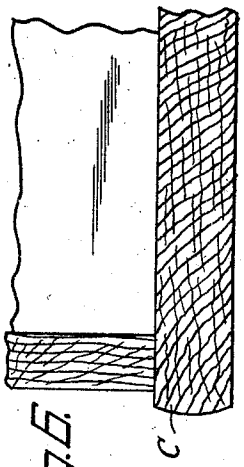


Fig. 6.



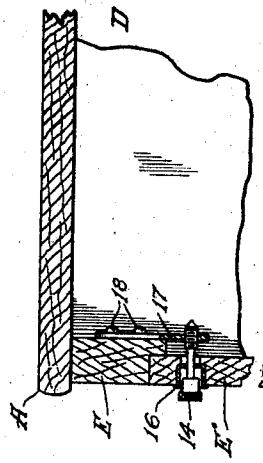


Fig. 8.

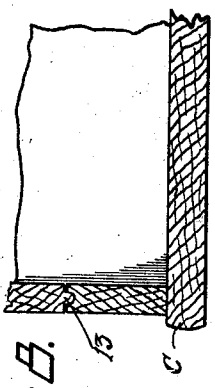


Fig. 5.

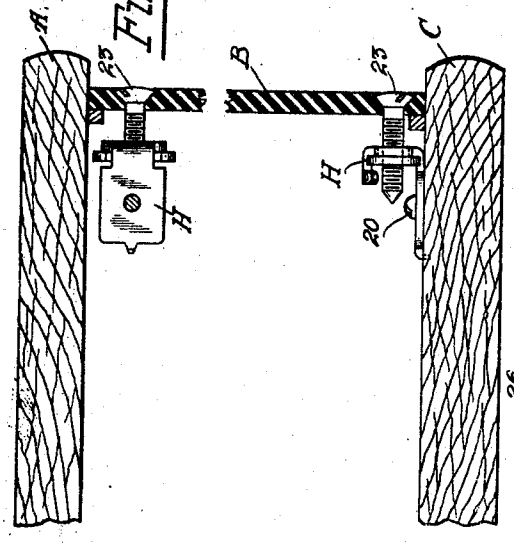
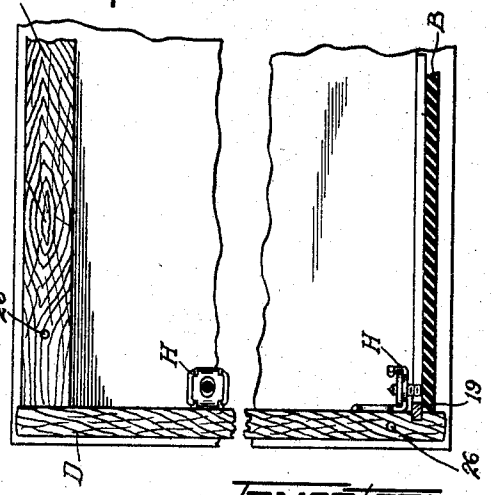


Fig. 7.



Inventor:
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Patented Mar. 3, 1925. 1,528,473

UNITED STATES PATENT OFFICE.

JOSEPH B. EDWARDS, OF CHICAGO, ILLINOIS, ASSIGNOR TO KELLOGG SWITCHBOARD AND SUPPLY COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CABINET.

Application filed February 19, 1923. Serial No. 619,797.

To all whom it may concern:

Be it known that I, JOSEPH B. EDWARDS, a citizen of the United States of America, residing in Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Cabinets, of which the following is a specification.

My invention relates to cabinets and more particularly to a cabinet employed for enclosing and supporting radio apparatus.

A feature of my invention is the provision of a cabinet which will permit its top, rear, or front part to be removed independently of each other to permit access to the various parts mounted in my cabinet, or, in other words, the provision of a cabinet which will permit access to the parts secured therein either from the top or the rear or the front of my cabinet.

Another feature of my invention is the provision of means for securing the different parts of my cabinet together.

The above features, as well as others, will be more clearly described in the ensuing specification and for a clearer understanding of my invention reference may be had to the accompanying drawings in which like reference characters in the several views denote like parts.

Fig. 1 is a front-plan view of my invention;

Fig. 2 is a top-plan view of my invention;

Fig. 3 is a rear view of my invention;

Fig. 4 is an end view of my invention showing a portion in section;

Fig. 5 is a view showing the manner in which the front part of my cabinet is secured to the other parts of the cabinet;

Fig. 6 is a view showing the manner in which the top or cover of my cabinet is secured to the other parts of my cabinet;

Fig. 7 is another view showing the manner in which the front part of my cabinet is secured to the other part of my cabinet;

Fig. 8 is a view showing the manner in which the removable rear part of my cabinet is secured to the other part of the cabinet.

Fig. 9 is a view showing a part of the means for securing the different parts of my cabinet together; and

Fig. 10 is a view showing Fig. 9 disassembled.

Referring now more in detail to my invention, A is the top or cover, B the front panel, C the bottom or base, D the ends, and E the rear panel of my cabinet all of which are secured together to form the cabinet of my invention in a manner to be later described.

Before describing the manner in which the different parts of my cabinet are assembled and secured together, I will first describe Figs. 9 and 10.

The U-shaped member 1 is made of some suitable metal and has its leg 2 extending longer than its other leg 3, said leg 2 being provided with a threaded orifice 4. The U-shaped member 1 has an oblong opening 5, and the legs 2 and 3 of said U-shaped member 1 have cut away portions 6 for purposes to be presently described. The leg 2 of member 1 is also provided with a spur 12 integrally formed therewith for a purpose which will be pointed out later. A member 7 is provided which has its body portion 8 intermediate of its ends reduced and provided with a threaded orifice 9. The reduced body portion 8 of member 7 is of a size to permit its insertion between the legs 2 and 3 of member 1 and to bring the wings 10 of said member 7 into engagement with the cut away portion 6 of the U-shaped member 1. The reduced portion 8 of member 7 is of a size to permit longitudinal movement as well as lateral movement of the said member 7 between the legs 2 and 3 of member 1. To secure the member 7 between the legs 2 and 3 of member 1, the wings 11 of the leg 3 are turned inwardly so that they will engage a sufficient amount of the lower face of member 7 to prevent it from disengaging legs 2 and 3 of member 1. The threaded orifice 9 in member 7 is so arranged that it comes in alignment with the opening 5 in the member 1, said opening 5 being somewhat larger than the orifice 9 in member 7. The members 1 and 7 as assembled and shown in Fig. 9 will be referred to in the ensuing specification as unit H.

A description of the manner in which the different parts of my cabinet are assembled and secured together will now be given.

The ends D are permanently secured in a suitable manner to the bottom or base C and the rear panel E is permanently secured in a suitable manner to the ends D and base C. The rear panel E is provided with a rectangular opening in which is fitted and re-

movably secured a door E′, said door E′ being secured in the panel E by means of a groove and tongue engagement 13 on one side and by means of a screw 14 which extends through a suitable opening in the cylindrical member 16 which is suitably secured in the door E′, and then extends through a suitable opening in the door E′ and has screw-threaded engagement with a suitably tapped orifice in the member 17 which member 17 is secured to panel E by suitable screws 18.

To each of the ends D and directly opposite the rear panel E is suitably secured a strip of wood 19 and directly back of this strip of wood 19 and near the corner of each end D is secured a unit H by means of a suitable screw 20 which extends through the orifice 4 in member 1 of the unit H and then has screw-threaded engagement with the end D, the spur 12 of said member engages a depression in the end D to prevent rotation of the unit H. The front panel B of my cabinet is provided with a plurality of suitable openings for permitting the various parts of the apparatus enclosed in my cabinet to be secured to the said front panel, said front panel and apparatus adapted to be removed from my cabinet as a unit.

Secured to the back of the front panel B, in a suitable manner, are a number of operable elements each of which has an extending operating portion (such as the end of a shaft) extending through a suitable opening in said front panel. A controlling member, such as a dial or knob, is secured to the extending portion for operating or controlling purposes. The dials are indicated on Figure 1 of the drawing by the reference character *d* and, the knobs are indicated by the reference character *k*. The dials *d* and the knobs *k* may be grasped by the hand and turned to control the parts associated with the respective dials and knobs. The members indicated (in Fig. 1) by the reference character *j* are the ends of protruding connection jacks, such as are used in radio sets. The elements referred to above as being secured to the back of the front panel B are adapted, when my cabinet is assembled, to be enclosed within said cabinet. I have not shown a view of such elements or apparatus enclosed within the cabinet, as a showing of the same is thought unnecessary for a clear understanding of my invention. Although I have described radio apparatus as being secured to the back of the front panel B and controlling members positioned in the front of said panel, it is to be understood that I do not wish to limit my invention to the application of such apparatus.

The front panel B is of a size to fit between the ends D and the top or cover A and base C respectively, so that its ends will engage the strips 19 secured to said ends D. To secure the front panel B in this position screws 23 are provided which extend through suitable openings in the panel B and then extend through the openings 5 in the member 1 and then have screw-threaded engagement with the tapped orifice 9 in member 7 of the unit H.

The opening 5 in member 1 is oblong and somewhat larger than the diameter of the screw 23 so that when the panel B is placed in position as described above the screws 23 will come in alignment with the said opening 5 in the members 1 of unit H. The member 7 of unit H has its tapped orifice 9 directly in alignment with opening 5 in member 1 as pointed out above so that when a screw 23 is inserted and extended through opening 5 in member 1, the pointed end of the screw 23 will engage the tapped orifice 9 in member 7 and as the screw 23 is moved inwardly, the member 7 being permitted to move between the legs 2 and 3 of member 7 both in a longitudinal and a lateral direction, the member 7 will be moved by the sloping sides of the pointed end of screw 23 in a direction to permit the screw 23 to make screw-threaded engagement with the tapped orifice 9 in said member 7. Thus it will be seen from the above that I have provided securing means for securing the front panel B in position, and it will be further seen that by having the opening 5 in member 1 larger than the diameter of the screw 23 and the member 7 movably supported between the legs 2 and 3 of member 1, and the screw 23 pointed at its one end, the screw 23 will find engagement with the tapped orifice 9 in member 7 even though when first inserted and extended through the opening 5 in member 1 the screw 23 does not come directly in alignment with the said tapped orifice 9. Thus it is apparent from the above description that the unit H will permit a slight variation in the position of the screw 23 without necessitating a change in order to effect engagement of the screw 23 with the tapped orifice 9 in member 7, as would be the case should the member adapted to be engaged by the screw 23 be secured in an immovable or stationary manner.

Each end D is provided with a pin 26 which rests in a suitable opening in the end D. The rear panel E is also provided with a pair of pins 26 and openings in the cover A are adapted to receive the pins 26 in the ends D and rear panel E to locate the cover A in relation to the members H which secure the cover in position. To secure the top or cover A in position, a unit H is secured to each of the ends D by means of a screw 28 which extends through the opening 4 in the member 1 and then has screw-threaded engagement with the end D and the spur 12 engages a depression in the end D to prevent rotation of said unit H. A unit H is also

secured to the back of the front panel B by means of a screw 28′ which extends through an opening in said panel B and has screw-threaded engagement with the unit H. A screw 29 is provided for each unit H and which screw 29 extends through a suitable opening in a cylindrical member 30 which is suitably secured in the cover A and which screw 29 then extends through a suitable opening in the cover A, opening 5 in member 1 and then has screw-threaded engagement with the tapped orifice 9 in member 7 of unit H. To remove the top or cover A all that is necessary is to remove the screws 29 and lift the cover off which will give access from the top of my cabinet to the apparatus mounted to the back of the front panel B.

Now should it be desired to get at the entire apparatus which is mounted on the back of the front panel B, the front panel B and apparatus secured thereto may be removed as a unit by removing the screws 23 and the screw 29 engaging the unit H secured to the back of said panel B. If it is desired to get at the apparatus from the rear of my cabinet it may be done by removing the screws 14 and lifting out the door E′.

Thus it will be seen from the above description and from the drawings that I have provided a cabinet simple and economical in construction and one which will permit access to the apparatus mounted therein from either the rear or the top, or which will permit the entire apparatus secured to the front panel and enclosed by my cabinet to be removed from the cabinet by removing screws 23 and screw 29 and then withdrawing the panel B and apparatus as a unit from the rest of the cabinet whereby access may be had to the entire apparatus.

While I have described a preferred embodiment of my invention, I do not wish to be limited to the exact structure as shown and described but intend to cover all that which comes within the scope and spirit of the appended claims.

Having described my invention, what I claim as new and desire to secure by United States Letters Patent. is:

1. In a cabinet of the character described having a removable front panel, a removable top, and a removable back panel, means including screw-threaded members secured within said cabinet and to said front, top and back panels, and screw-threaded members for extending through said front, top and back panels and into screw-threaded engagement with the members of said first means to hold said top, front and back panels in place, said front panel, top, and back panel being removable independently of each other.

2. In a cabinet of the character described, a front panel, apparatus enclosed in said cabinet and secured to said front panel, means including screw-threaded members, and brackets having floating members adapted to be engaged and disengaged by said screw-threaded members for permitting access to said apparatus either from the top or rear of said cabinet, and means including screw-threaded members, and brackets having floating members adapted to be engaged and disengaged by said screw-threaded members for permitting said front panel and apparatus secured thereto to be removed from said cabinet as a unit.

3. In a cabinet of the character described, a front panel, apparatus secured to said front panel and enclosed in said cabinet, a removable top for said cabinet for permitting access to said apparatus from the top of the cabinet, a removable door in the rear of said cabinet for permitting access to said apparatus from the rear of said cabinet, and means including screw-threaded members, and brackets having floating members adapted to be engaged and disengaged by said screw-threaded members for permitting the removal of said front panel and apparatus secured thereto as a unit, whereby said apparatus is entirely exposed to give access thereto.

4. A cabinet of the character described, including a front panel apparatus secured to said front panel, and means for securing said front panel to said cabinet and adapted to permit said panel and apparatus to be removed from said cabinet as a unit, said means including a U-shaped member having an orifice, a second member having a tapped orifice secured between the legs of said U-shaped member so that said tapped orifice is in alignment with said first orifice, a threaded member for extending through said front panel and orifice in said U-shaped member and adapted to have screw-threaded engagement with the tapped orifice in said second member whereby said front panel is secured to said cabinet.

5. A cabinet of the character described including a top or cover, means for securing said top or cover to said cabinet and to permit said top or cover to be removed from said cabinet, said means including a U-shaped member having an opening, another member having a tapped orifice smaller than said opening, secured to said U-shaped member so that said tapped orifice is in alignment with said opening, a threaded member for extending through said top or cover and opening in said U-shaped member and adapted to engage said tapped orifice to secure said top or cover on said cabinet.

6. A cabinet of the character described including independently removable parts, means for securing said removable parts to said cabinet, said means including U-shaped members having floating members secured

thereto, screw-threaded members for extending through said removable parts, and adapted to have engagement with said floating members to secure said removable parts to said cabinet.

7. A cabinet of the character described including a removable member, a U-shaped member having an opening, another member having a tapped orifice secured between the legs of said U-shaped member and adapted to be moved relative to said U-shaped member, a threaded member for extending through said removable member and opening in said U-shaped member and to engage said other member to cause its tapped orifice to receive said threaded member whereby said removable member is secured to said cabinet.

8. A cabinet of the character described including removable elements, means for securing said removable elements to said cabinet, said means including stationary elements having openings and movable elements having orifices, said movable elements being secured to said stationary elements, and members for extending through said removable elements and openings in said stationary elements and adapted to engage the orifices in said movable elements whereby said removable elements are secured to said cabinet.

9. A cabinet of the character described including a rear panel provided with an opening, a door for engaging said opening, and means for securing said door in said opening, said means including a tongue and groove joint engagement between said door and panel, and also including a member provided with a tapped orifice secured to said rear panel and a screw-threaded member for extending through said door and adapted to have screw-threaded engagement with the tapped orifice in said member.

Signed by me at Chicago, in the county of Cook and State of Illinois, on this 17th day of February, 1923.

JOSEPH B. EDWARDS.