E. E. SMART.

WALL CASE.

APPLICATION FILED OCT. 14, 1915. RENEWED OCT. 17, 1916.

1,208,393.

Patented Dec. 12, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

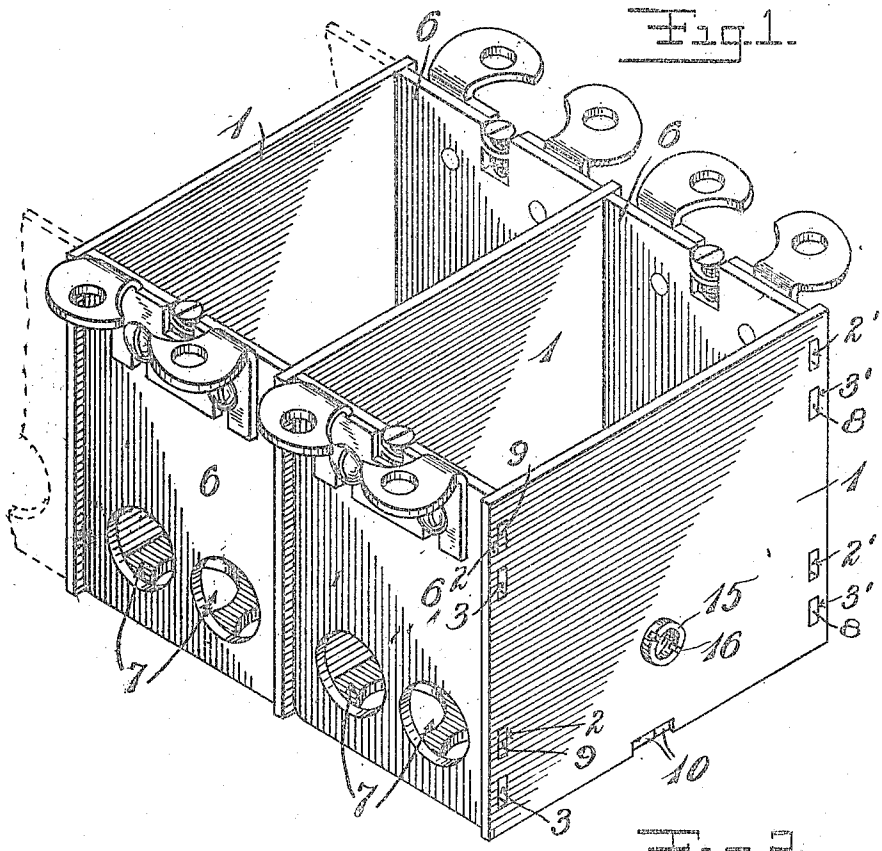
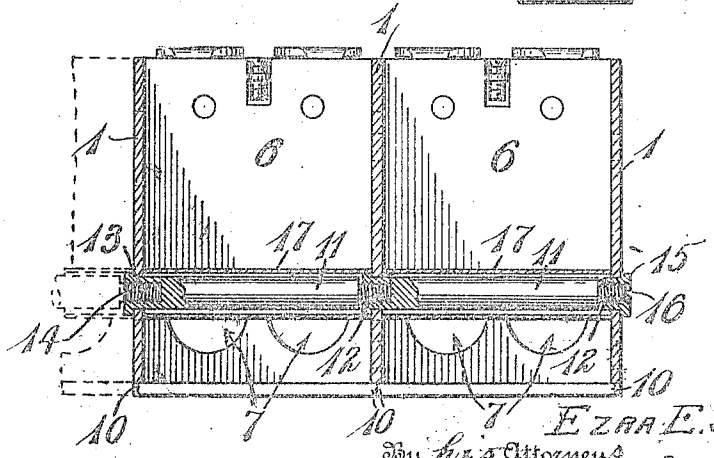


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

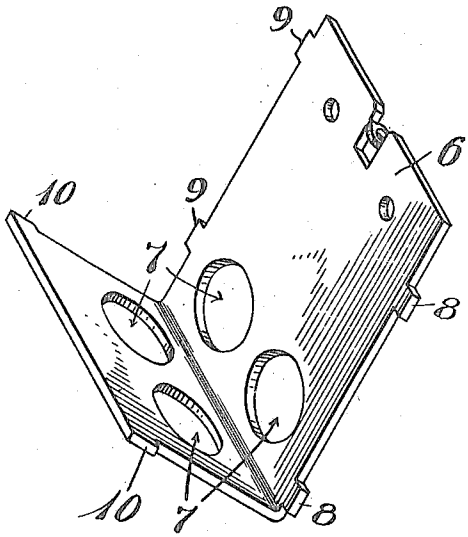


Fig. 4.

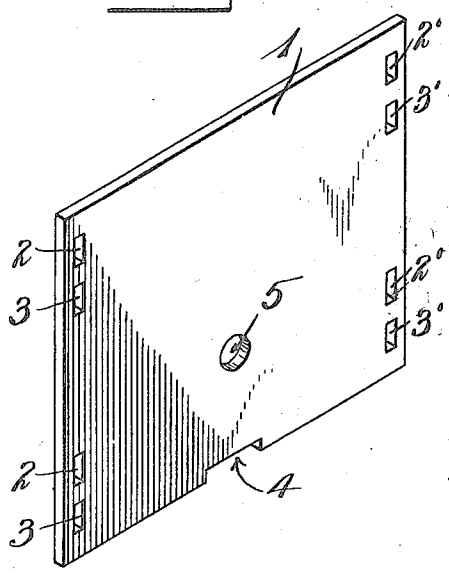


Fig. 5.

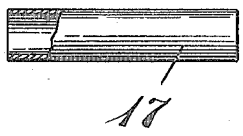


Fig. 6.

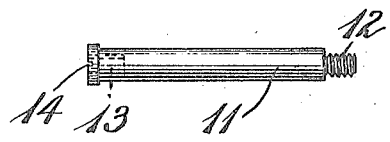


Fig. 7.



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UNITED STATES PATENT OFFICE.

EZRA E. SMART, OF HARTFORD, CONNECTICUT.

WALL-CASE.

1,208,393. Specification of Letters Patent. Patented Dec. 12, 1916.

Application filed October 14, 1915, Serial No. 55,811. Renewed October 17, 1916. Serial No. 126,186.

To all whom it may concern:

Be it known that I, EZRA E. SMART, a citizen of the United States, residing at Hartford, Connecticut, have invented a certain new and useful Improvement in Wall-Cases, of which the following is a full, clear, and exact description.

My invention relates to improvements in sectional wall cases, and has for its object to produce a wall case which can be easily built up from a few number of parts and added to indefinitely so that it may be enlarged as desired.

It further has for its object to produce a wall case, the parts of which when disassembled take up but little room and are easily manufactured.

It further has for its object to reduce the number of parts necessary and to reduce the number of shaping and bending operations.

It further has for its object to reduce or eliminate the necessity of riveting.

The following is a description of an embodiment of my invention, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a wall case embodying my invention. Fig. 2 is a longitudinal section of the same on a vertical plane passing through the center thereof. Fig. 3 is a perspective view of an intermediate member. Fig. 4 is a perspective view of one of the transverse plate members. Fig. 5 is a side elevation partly in section of a tubular spacer. Fig. 6 is a side elevation of a connector. Fig. 7 is a side elevation of a nut for one connecter.

Referring more particularly to the drawings, 1—1—1 are transverse members consisting of flat plates having punched therein the holes 2—2, 2′—2′, 3—3 and 3′—3′, the notch 4 and the round hole 5 (Fig. 4).

6 is an L-shaped intermediate member having the usual conductor openings 7 punched therein and side projections 8—8 and 9—9, the projections 8—8 being located at heights corresponding to the holes 3—3 and 3′—3′ and the projections 9—9 being located at heights corresponding to the openings 2—2 and 2′—2′ in plates 1. The intermediate members are also provided with projections 10 which are adapted to fill one half the notch 4. Two L-shaped members 6, when properly placed, form a divided U-shaped structure constituting U-shaped plate separating means.

11 is a connector having formed thereon at one end a reduced screw threaded portion 12 and in the other end a head with a screw threaded recess 13. It is also provided with a screw driver slot 14.

15 is a nut provided with a screw driver slot 16 and adapted to be screwed upon any screw threaded projection 12.

17 is a tubular spacer surrounding the shank of the connector 11 and sufficiently large to admit the head of said member, as shown in Fig. 2. This spacing member 17 is preferably, though not necessarily, used.

In assembling the wall case, one of the members 11 is first passed through the hole 5 in one of the plates 1. One of the spacers 17, if such spacer is used, is then placed over the shank of the connector 11 and two of the members 6 are then added, the projections 9—9 of one member 6 fitting in the holes 2′—2′ of the plate 1 and the projections 8—8 of the other member 6 fitting in the holes 3—3 of the plate. Another plate 1 is then added, the free projections 8—8 of the intermediate separating means fitting in the holes 3′—3′ and the free projections 9—9 of the other intermediate member fitting in the holes 2—2. The nut 15 is then applied holding the parts together so that they form the structure shown at the right in Figs. 1 and 2.

To extend the box the additional members 6 are applied to the plate 1 through which the head of the member 11 protrudes, a second spacer 17, if used, is placed over said head, a third plate 1 is applied and a second member 11 is passed through the third plate 1 and the second spacer 17 and its inner end is screwed into the screw threaded recess 13 in the first member 11. By repeating these operations any number of sections can be built up so as to make a divided wall case having any desired number of chambers.

It will be seen from the foregoing that at most a wall case proper containing a single chamber requires but two end pieces, an intermediate U-shaped piece, a connector and a nut, five pieces in all. If the U-shaped member is divided into two portions, as shown, so that the parts thereof may be easily nested, only six pieces are required, and if the spacer 17 is used, only seven pieces are required, there being no riveting. In a similar manner the addition of similar chambers requires a correspondingly small

number of parts, the preferred form, including the spacer 17, requiring the use of only four kinds of additional parts, all of which parts are present in the first section also.

The case as above described is supplied with ordinary retaining ears and with screws, as shown, but these ears and screws do not form a portion of the wall case proper or constitute any part of my invention.

As will be evident to those skilled in the art, my invention permits of various modifications without departing from the spirit thereof or the scope of the appended claims.

What I claim is—

1. In a wall case, the combination of two end plates provided with openings adjacent to each of their ends, intermediate separating means having vertical and horizontal portions provided on both sides with projections which enter said openings in the plate members, and clamping means passing through said two plate members and between the upright portions of said separating means.

2. In a wall case, the combination of two end plates provided with openings adjacent to each of their ends, intermediate separating means having vertical and horizontal portions provided on both sides with projections which enter said openings in the plate members, clamping means passing through said two plate members and between the upright portions of said spacing means, and a spacer surrounding said clamping means.

3. In a wall case, the combination of two end plates provided with openings adjacent to each of their ends, intermediate separating means having vertical and horizontal portions provided on both sides with projections which enter said openings in the plate members, a headed externally threaded clamping screw passing through said two plate members and between the upright portions of said spacing means, said clamping screw having also a screw threaded recess in its head adapted to receive the externally screw threaded portion of a similar clamping screw.

4. In a wall case, the combination of two end plates provided with a series of openings adjacent to each of their ends, intermediate separating means having vertical and horizontal portions provided on both sides with projections which enter said openings in the plate members, clamping means passing through said two plate members and between the upright portions of said separating means, the projections on said separating means entering offset openings in said plate members.

5. In a wall case, the combination of two end plates provided with openings adjacent to each of their ends, intermediate separating means having vertical and horizontal portions provided on both sides with projections which enter openings in the plate members, clamping means passing through said two plate members and between the upright portions of said separating means, said separating means being divided so as to form two L-shaped members.

6. In a wall case, the combination of two end plate members provided with openings adjacent to each of their ends, intermediate L-shaped separating means having vertical and horizontal portions provided on both sides with projections which enter said openings in the plate members, clamping means passing through said two plate members and between the upright portions of said separating means, said end plate members being each provided with an opening near its bottom and the lower ends of said L-shaped separating means being provided on each side with lateral projections adapted to simultaneously enter said last mentioned openings.

7. In a wall case, the combination of two end plates provided with openings adjacent to each of their ends, intermediate separating means having vertical and horizontal portions provided on both sides with projections which enter said openings in the end plates, a clamping screw passing through said two end plates and between the upright portions of said spacing means, and a nut engaging the screw threaded portion of said clamping screw.

EZRA E. SMART.