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A. J. SMITH

1,907,679

KNOCK-DOWN PORCELAIN ENAMELED CABINET

Filed Dec. 26, 1930

2 Sheets-Sheet 1

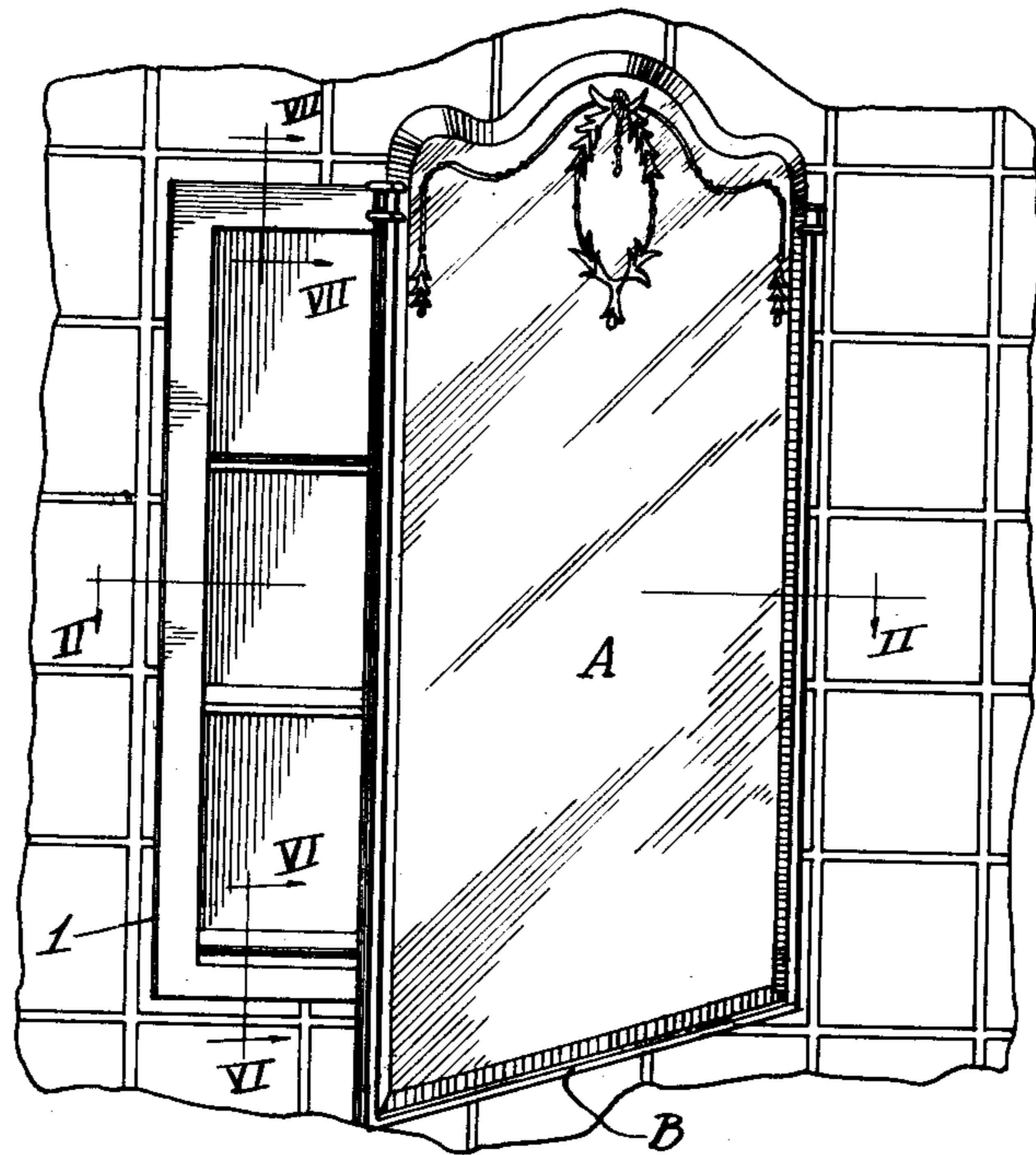


FIG. 1.

FIG. 3.

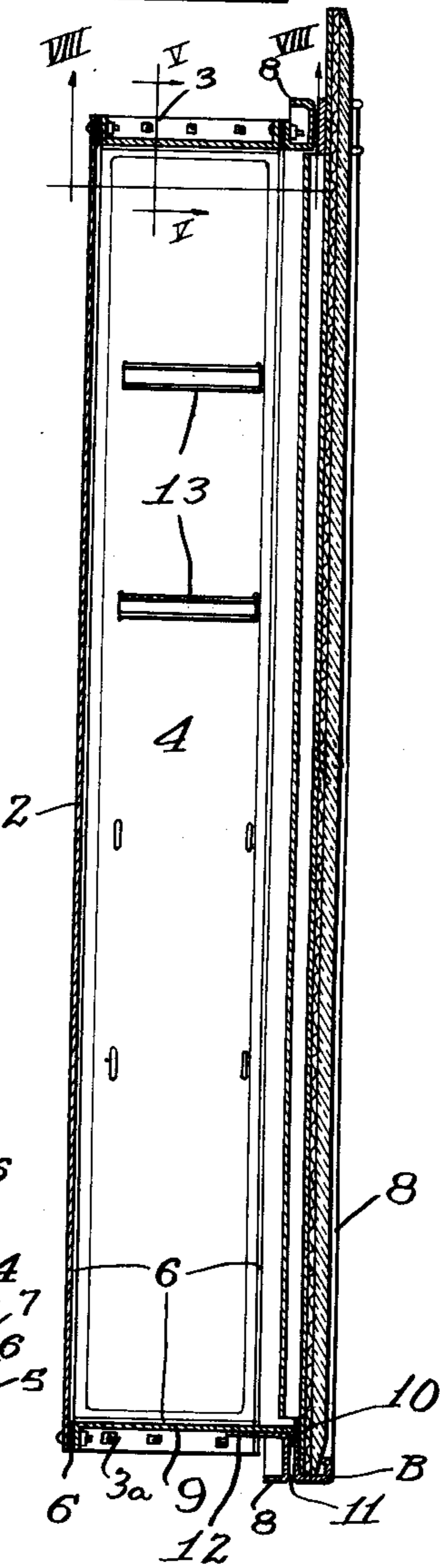
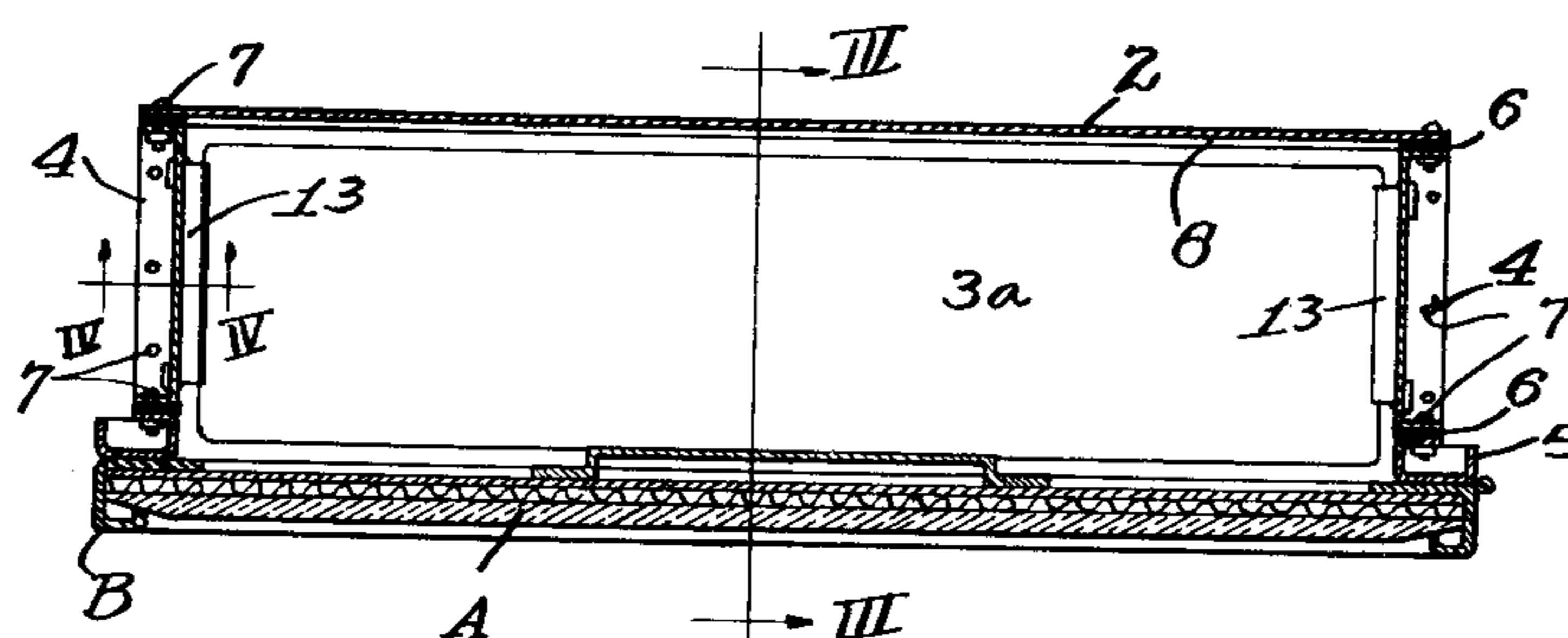


FIG. 2.



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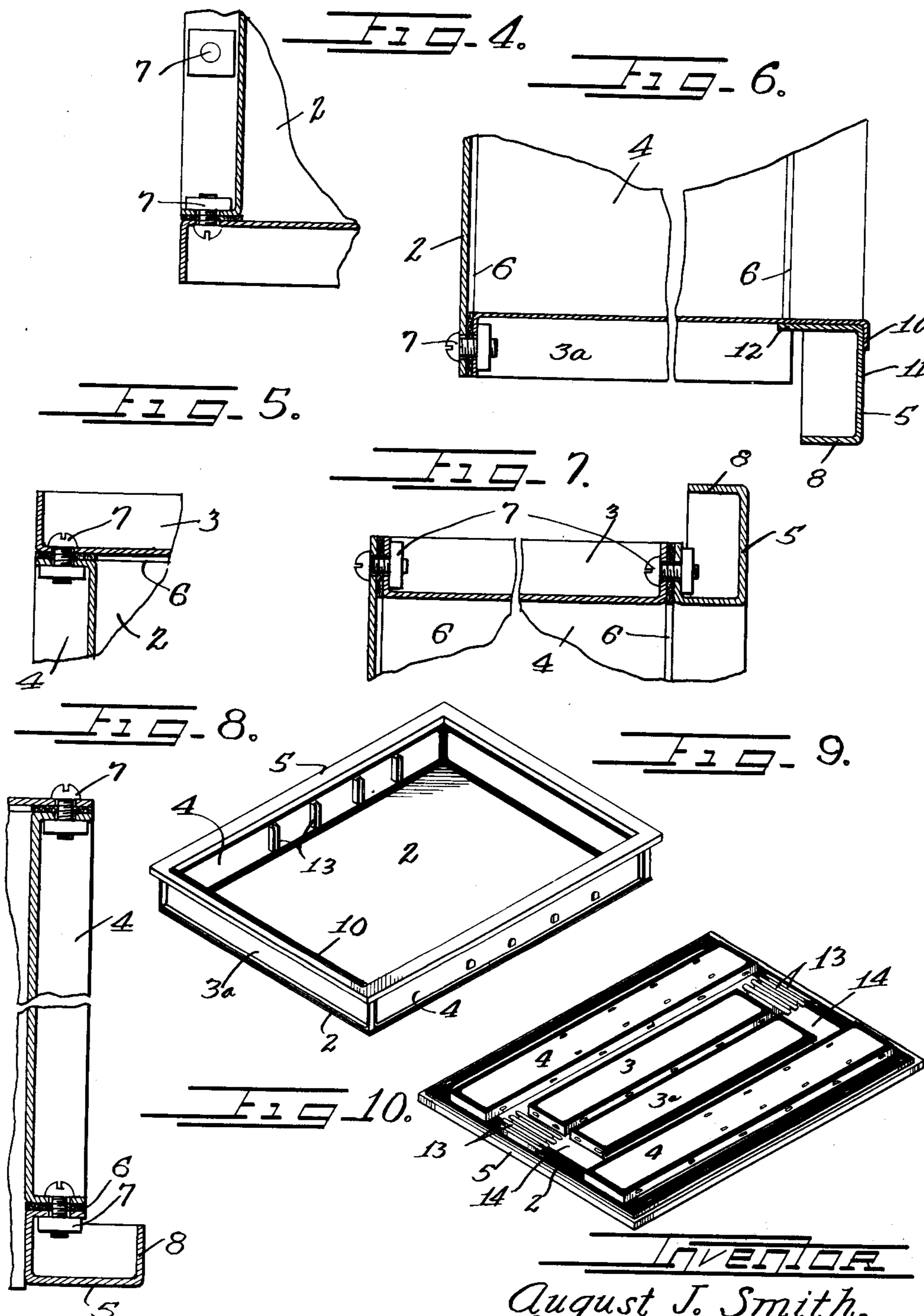
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KNOCK-DOWN PORCELAIN ENAMELED CABINET

Filed Dec. 23, 1930

2 Sheets-Sheet 2



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# UNITED STATES PATENT OFFICE

AUGUST J. SMITH, OF MOUNT PLEASANT, MICHIGAN

KNOCK DOWN PORCELAIN ENAMELED CABINET

Application filed December 26, 1930. Serial No. 504,745.

This invention has to do broadly with wall cabinets of the type adapted to be built into the wall so that the front thereof is substantially flush with the wall itself. More particularly, my invention relates to medicine and the like cabinets of the character employed in bathrooms.

Bathroom cabinets heretofore in vogue have been made in one piece, so that if any part of the enamel chipped off, which is exceedingly likely upon shipment thereof, the appearance of the whole cabinet was spoiled, and the cabinet must be installed as is, or a new one ordered. This obviously entails a great amount of expense and inconvenience, and unsightly cabinets are often installed. Another drawback of the one-piece cabinet lies in the fact that where a number of these are shipped, the space taken up by each is the same as if it were solid through and through, so that the cost of shipping is quite high. Another disadvantage of the one-piece cabinet lies in the manufacture thereof, since expensive dies must be used.

It is, accordingly, one of the principal objects of this invention to provide a small cabinet of the class referred to which may be manufactured by inexpensive methods, presents a neat appearance which may blend with the design of other fixtures and the wall, which consists of a plurality of parts easily assembled and disassembled, and which may be shipped in such a manner as to occupy a minimum amount of space, with a resultant lower cost of shipment.

A subsidiary object of the invention involves the employment of felt or the like at the joints of the various parts of my knockdown cabinet so that when the device or cabinet is installed in the wall, the parts will not contact one another, leakage of moisture from the wall into the cabinet will be inhibited, and prevent chipping parts when assembling and tightening bolts. Thus a cabinet made and installed in accordance with my instructions will be every bit as efficient as the conventional one-piece type now in vogue.

Another object of the invention involves

the provision of a polished metallic frame in combination with a wall cabinet. With such a construction, wherein for example, the metal is a chrome steel or the like, the frame may be cleaned simply by wiping once with a damp cloth, and the thrust of the cabinet door will be taken without a possibility of chipping the enamel.

Other and further important objects of this invention will be apparent from the disclosures in the specification and the accompanying drawings.

This invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings:

Figure 1 is a fragmentary elevational view of the wall of the bathroom or the like with my novel cabinet installed, the door of the cabinet being shown ajar.

Figure 2 is a sectional view taken substantially in the plane indicated by the line II—II of Figure 1, with the door in closed position.

Figure 3 is a sectional view taken approximately in the plane indicated by the line III—III of Figure 2.

Figure 4 is a fragmentary sectional view taken approximately in the plane indicated by the line IV—IV in Figure 2, certain parts being shown in elevation.

Figure 5 is a view taken substantially in the plane indicated by the line V—V in Figure 3.

Figure 6 is a view partly in elevation taken approximately in the plane designated by the line VI—VI in Figure 1.

Figure 7 is a view taken approximately in the plane indicated by the line VII—VII in Figure 1, certain parts being shown in elevation.

Figure 8 is an enlarged fragmentary sectional view taken substantially in the plane indicated by the line VIII—VIII in Figure 3.

Figure 9 is a diagrammatic sectional view showing my novel cabinet as it appears ready for installation.

Figure 10 is a perspective view in substantially the same scale as that in Figure

9 showing the cabinet disassembled and arranged for shipment.

Referring now more particularly to the drawings, wherein the same parts are indicated by identical reference numerals, my novel wall cabinet is indicated at 1, and consists of a rear wall plate 2, top and bottom channel members 3 and 3a, respectively, identical side members 4 of channel shape and having closed ends, and a frame member 5 of channel shape in cross-section. Felt or like material 6 disposed between the channel members 3 and 4 and the wall plate 2 and between said channel members 3, 4, and the frame member 5, serves to prevent direct contact between the respective members and also functions to maintain the cabinet in a watertight condition when the same is installed in the wall of a bathroom or the like, thereby preventing seepage of moisture into the cabinet.

It is to be noted that the top and bottom members 3 and 3a are commensurate in length with the width of the back plate 2, so that the side members 4, while extending along the side edges of the back plate 2, are in effect disposed between the upper and lower members 3 and 3a. This is clearly shown in Figure 9 as well as in other figures. The adjacent portions of the various members constituting the cabinet are connected together as illustrated in the various views by means of screws and nuts 7, a sufficient number of these fastening instrumentalities being employed in order to insure a tight fit all over. The flange 8 of the frame member 5 projects laterally beyond the remainder of the cabinet, and the free edge of said flange is adapted for engagement with the wall of the bathroom or the like in connection with which it is to be employed. The web 9 of the channel member 3a extends beyond the end flanges thereof and is disposed within the frame member 5 as shown in Figure 3, and is provided with a downwardly extending lip 10 in engagement with the front face 11 of the frame member 5. The frame member 5 is provided with an inwardly extending lip 12 which cooperates with the extended portion of the web 9.

The door A in its frame B is shown in open position in Figure 1, and closed position in Figures 2 and 3, and is covered by United States Letters Patent No. 1,751,101 granted to me on March 18th, 1930.

A comparison of the drawings of Figures 9 and 10 will suffice eminently to show the great saving in shipping space which is made in providing a knockdown cabinet of this type. The saving is approximately three-fourths of the cost which would be necessitated if the cabinet were made in the conventional manner, that is, in one piece. This saving in shipping space is accompa-

nied by a saving in the use of packages for the cabinets.

It will be noted that the holes for the various screws are elongated as shown in Figure 10 so that no time need be lost in fitting the screws and assembling the various parts to form the finished cabinet.

For purposes of shipment, the parts may be assembled substantially as follows:

The frame member 5 is placed lowermost and the rear wall plate 2 superimposed thereon. The side members are located alongside the corresponding side edges and on top of the plate 2, and the top and bottom members 3 and 3a are located side by side, parallel to and between the side members 4. In the modification shown herein, the side members 4 are longer than the top and bottom members 3 and 3a. In accordance with this construction, spaces will be available at 14 for receiving the shelf members 13 and the screw or nut means 7, not shown in Figure 10. The strips of felt 6, also not shown in Figure 10, may be located between the various members 3, 3a, and 4. Of course, in packing the various parts, the shipper will take care to prevent intimate contact between the various parts thereby reducing the possibility of chipping of the porcelain enamel.

It will be evident from the foregoing that I have provided a knockdown cabinet characterized by utmost ease and facility of assembly and disassembly, of extremely low cost of shipping, and having a less likelihood of damage in transit than is true of the type of cabinet made in one piece. Another feature of no little importance in this connection resides in the fact that should any part arrive in a damaged condition, that particular part can be replaced at its own cost, which is necessarily a small fraction of the cost of the whole cabinet.

The cabinet parts may be made of sheet or cast metal or other material, and may be coated with porcelain enamel or the like, or simply polished. The invention is applicable to stoves and other articles, enameled or otherwise, as well as to wall cabinets.

It will be appreciated that the advantage of employing a polished metallic frame lies, in addition to the cleaning feature, in the fact that no harm will arise in connection with the closing or slamming of the cabinet door. Were the frame enameled, the enamel would be very likely to chip off under these circumstances.

I am aware that many changes may be made, and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I, therefore, do not purpose limiting the patent granted hereon, otherwise than necessitated by the prior art.

I claim as my invention:

1. A porcelain enamel cabinet of the built-

- in type, comprising a frame, a rear wall plate, top and bottom members commensurate in length with the width of the plate, side wall members extending along the side edges of the plate and disposed intermediate the top and bottom members, all of said members being located between the plate and the frame and having flanges extending away from the interior of the cabinet, the free edges of said flanges lying in the same planes with the respective edges of the plate, the side flanges of said members being located adjacent said plate and frame, the end flanges of the side members being disposed adjacent the ends of the top and bottom members, felt or the like having a plurality of holes and disposed between the adjacent portions of the various parts, said portions being provided with elongated holes in register with the holes in the felt, and fastening means passing through said holes, whereby said fastening means are disposed entirely without the cabinet interior, and all of said parts are held together tightly without intimate contact to prevent seepage of moisture into the cabinet and to prevent chipping and other abuse of the enamel.
2. A porcelain enameled cabinet of the built-in type adapted to be knocked down for shipping purposes comprising a frame, a rear wall plate, top and bottom members commensurate in length with the width of the plate, side wall members extending along the side edges of the plate, all of said members being located between the plate and the frame, and having flanges extending away from the interior of the cabinet, the side flanges of said members being located adjacent said plate and said frame, the end flanges of the side members being disposed adjacent the ends of the top and bottom members, the web of said bottom member extending beyond the end flanges thereof and having a downwardly extending lip for engagement with the front face of said frame, and an inwardly extending lip on said frame cooperating with said extended portion of said web for supporting the same.
3. A porcelain enameled cabinet of the built-in type adapted to be knocked down for shipping purposes comprising a frame, a rear wall plate, top and bottom members commensurate in length with the width of the plate, side wall members extending along the side edges of the plate, all of said members being located between the plate and the frame, and having flanges extending away from the interior of the cabinet, the side flanges of said members being located adjacent said plate and said frame, the end flanges of the side members being disposed adjacent the ends of the top and bottom members, the web of said bottom member extending beyond the end flanges thereof
- and having a downwardly extending lip for engagement with the front face of said frame, and an inwardly extending lip on said frame cooperating with said extended portion of said web for supporting the same, and means extending through said flanges for clampingly holding the parts together rigidly with respect to each other, strips of resilient fibrous material disposed between adjacent portions of the various parts of the cabinet, whereby intimate contact of the parts and injury to the enamel is prevented.
- In testimony whereof I have hereunto subscribed my name at Mount Pleasant, Isabella County, Michigan.
- AUGUST J. SMITH.