United States Patent [19]

Schneider

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[54] **CONTAINER IN PARTICULAR FOR USE AS BATHROOM CABINET**

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[52] **U.S. Cl.** ..... **220/9 F;** 220/10; 312/214; 220/9 R

[51] **Int. Cl.** . **A47b 67/02;** B65d 25/36; B65d 25/14

[58] **Field of Search** ..... 220/4 F, 9 F, 9 R, 9 G, 220/10, 83, DIG. 12, DIG. 14; 312/214, 224, 227, 330 R, 330 SM, 257 SM

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Attorney, Agent, or Firm—Karl F. Ross; Herbert Dubno

[57] **ABSTRACT**

A cabinet housing which comprises a one-piece core defining all of the side walls and the back wall of the housing and individual sheet-metal members overlying the back wall within the housing and pushed onto each of the side walls from the open end of the housing. The side wall members have flanges reaching behind the back of the one-piece body and are formed with alternating tongues and notches interdigitating with the tongues and notches along the edges of the back wall member.

4 Claims, 11 Drawing Figures

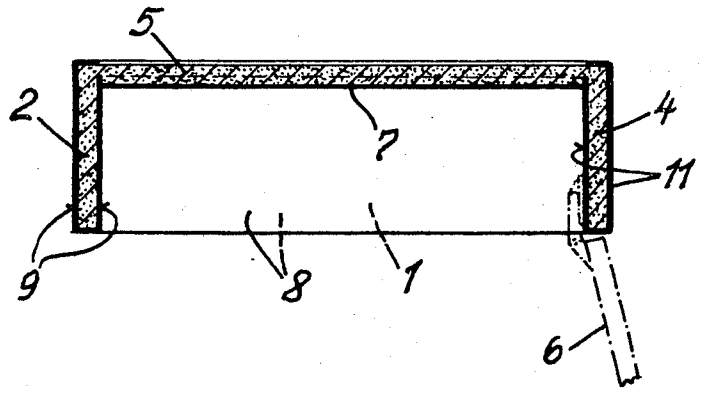

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Fig.1

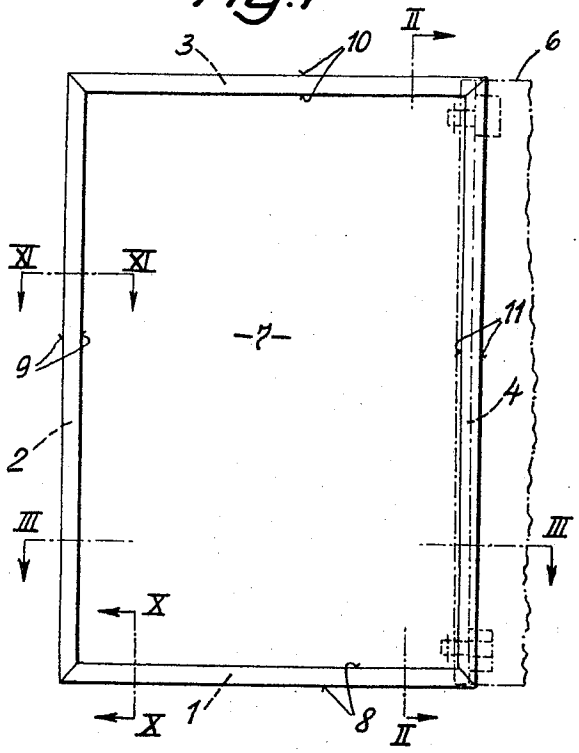


Fig.2

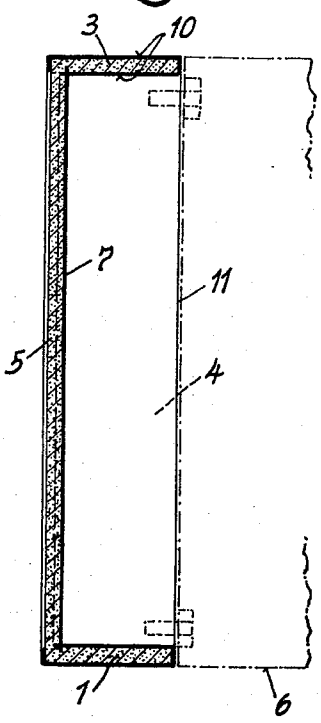


Fig.3

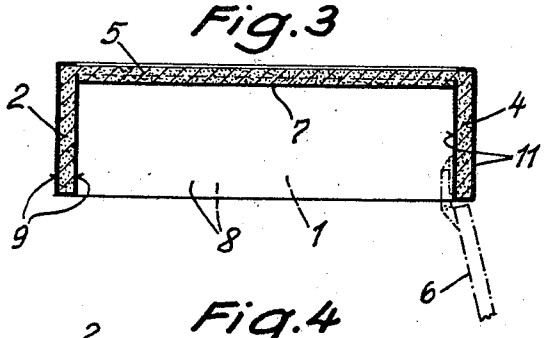


Fig.4

Fig.5

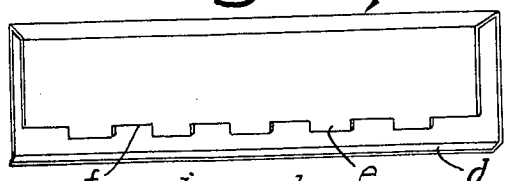
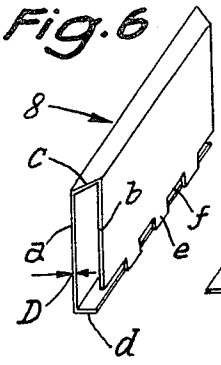


Fig.6



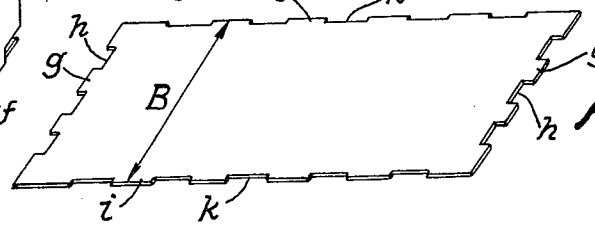


Fig.7

Fig.8

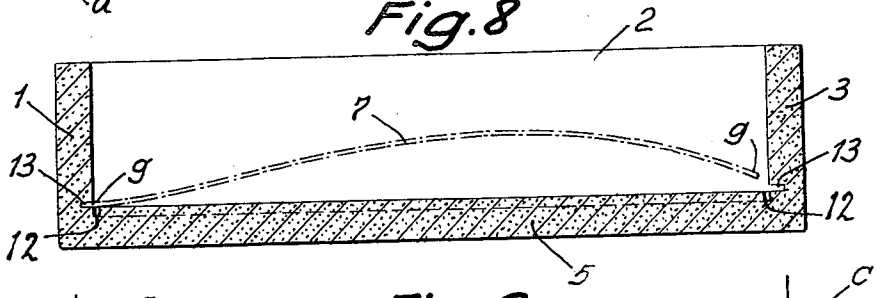


Fig.9

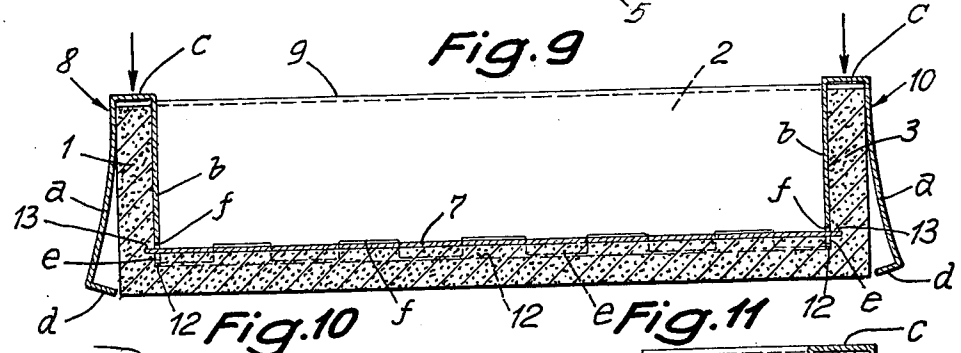


Fig.10

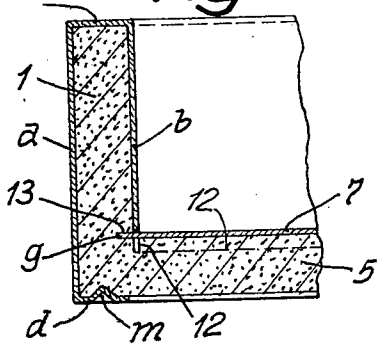
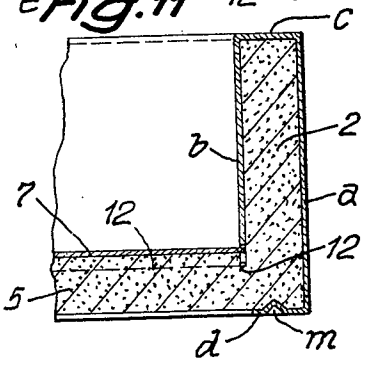


Fig.11



CONTAINER IN PARTICULAR FOR USE AS BATHROOM CABINET

This invention relates to a container, in particular for use as a bathroom cabinet, having a hollow space defined by side walls and a further wall acting as the back or bottom.

Containers of the type known heretofore have been made of wood or sheet metal chiefly. However, the proper working of these materials entails a relatively high expenditure of work, time and cost. Moreover, wood is very hygroscopic and therefore only of limited suitability for use in damp rooms such as bathrooms, while larger containers made from sheet metal often lack the necessary rigidity.

The present invention has as its object to obviate these disadvantages. The invention achieves this by producing all walls together with the back in the form of a single (i.e., one-piece) molding of hard foamed plastics, the walls being clad with U-shaped profiled bodies which are pushed thereon from the front so as to be covered completely inside, outside and at the front edges.

Hard foamed plastics of this kind combine high dimensional stability with low specific weight. Containers made from such materials are therefore not only very light, but may be clad with thin and hence lightweight material due to the high rigidity of the foamed plastic body.

The accompanying drawing shows by way of example an embodiment of the invention, and wherein:

FIG. 1 shows a front view of the container designed as a bathroom cabinet, in the position for use;

FIG. 2 is a vertical section taken along the line II—II of FIG. 1;

FIG. 3 is a horizontal section taken along the line III—III of FIG. 1;

FIG. 4 shows fragmentarily a detail from FIG. 1 on an enlarged scale;

FIG. 5 is a diagrammatic view of a side wall cladding profile;

FIG. 6 is a diagrammatic view of a cladding profile for an end wall;

FIG. 7 shows a diagrammatic view of the back wall covering plate;

FIG. 8 is a longitudinal section of the molding forming the container, placed on its back for fitting the wall claddings;

FIG. 9 is a corresponding longitudinal section showing the side wall claddings;

FIG. 10 is a part-sectional view taken along the line X—X of FIG. 1, on an enlarged scale;

FIG. 11 is a part-sectional view taken along the line IX—IX of FIG. 1, on an enlarged scale.

Referring to the drawing, numerals 1 to 4 designate four side walls, and 5 denotes the back wall of a container closable with a hinged door 6, which may be employed, say, as a bathroom cabinet. The side walls 1 to 4 and the back wall 5 consist of a single moulding of hard foamed plastics, such as polyvinyl chloride, polyurethane, polystyrene, phenolformaldehyde resin, etc. The inside of the back wall 5 is lined with a covering piece 7 consisting of, say, sheet metal, whereas the side walls 1 to 4 have cladding profiles 8 to 11 pushed thereover, thus covering the side walls completely inside, outside and at the front edges.

The cladding profiles 8 to 11 have an open box shape with two sides *a* and *b* and a web *c* joining them. The outer side *a* of the box profile has its free end angled at *d*, and it is longer than the inner side *b* by the thickness of the back wall 5 approximately. Along their free edges the inner sides *b* have projections or tongues *e* and gaps or notches *f* on the mortice and tenon principle. The covering piece 7 fitting over the back wall 5 also has projections *g* and corresponding gaps *h* along its ends, the projections *g* of the covering piece 7 being displaced by the width of one projection in relation to the projections *e* of the cladding profiles 8 and 10 so as to interdigitate therewith. The sides of the covering piece 7 are similarly alternately provided with projections *i* and gaps *k*. Measured over the projections *i* the width B of the covering piece 7 corresponds to the inside width of the foamed plastics moulding, the gaps *k* having less depth than the gaps *h* along the end edges, the depth of the gaps *k* corresponding to the material thickness D of the cladding profiles. Recessed into the back wall 5 is a groove 12 extending along the side walls 1 to 4. Other grooves 13 are recessed into the side walls 1 and 3 of the foamed plastics molding immediately above the back wall 5.

To fit the back wall 5 with the covering piece 7, the latter is bent somewhat as indicated by the dash-dotted lines in FIG. 8. As soon as the projections *g* of the covering piece 7 engage the gaps 13 of the side walls 1 and 3, the covering piece 7 straightens out owing to its inherent springiness, whereupon its rests flat against the back wall 5. The depth of the gaps *h* corresponds to the depth of the grooves 13 plus the material thickness D (FIG. 6) of the cladding profiles.

With the covering piece 7 fitted into the foamed plastics moulding in the manner described, the cladding profiles 8 to 11 can be pushed over the side walls 1 to 4. To do thiss the outer sides *a* of the profiles must be bent out somewhat on account of the angled edge *d*, as shown in FIG. 9. With the cladding profiles completely pushed over the side walls, their projections *e* engage the groove 12 recessed into the back wall, while at the same time they engage through gaps *h* and *k* the edges of the covering piece 7. In this position the sides *a* pf the cladding profiles spring back and rest close up to the side walls of the foamed plastic molding, the angled edges *d* obtaining a hold on the back wall 5. To ensure a positive bond between the cladding profiles and the foamed plastics moulding, the angled edges *d* are crimped at *m* in places as shown in FIGS. 10 and 11.

The foamed plastics mouldings can be produced easily, quickly and very inexpensively, and the cladding can be applied simply, without great effort and in a minimum of time. It should be emphasized in particular that practically no tools are required for assembly.

For bathrooms cabinets the hinged door 6 is preferably fitted with a mirror. If desired the inside of the cabinet may be provided with shelves and divided into various compartments.

What I claim is:

1. A box-like container adapted to be used as a bathroom cabinet comprising:

a one-piece molded hard-foam plastic core of rectangular outline and a back wall portion with four side wall portions contiguous with one another and projecting forwardly from said back wall portion;

a sheet metal member overlying the innerface of said back wall portion and reaching substantially to said side wall portions around its periphery;

substantially U-profile sheet metal side wall members pushed onto said side wall portions and having inner legs reaching to said back wall member, webs overlying the forward edges of said side wall portions, outer legs flanking said side wall portions and reaching to the rear face of said back wall portion, and inwardly turned flanges overlying and engaging said rear face.

2. The container defined in claim **1** wherein said inner legs are provided with alternating tongues and notches and said periphery of said rear wall member is provided with alternating tongues and notches interdigitating with the tongues and notches of said inner legs.

3. The container defined in claim **2** wherein said body is formed along the inner junction of said side wall portions and said rear wall portions with innerwardly opening grooves receiving tongues of one of said members.

4. The container defined in claim **3** wherein said flanges are formed with bent portions received in recesses of complementary shape formed in said rear face.

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