Oct. 25, 1949. G. H. NORQUIST 2,485,647

INSULATED CONTAINER STRUCTURE

Filed Oct. 26, 1945 3 Sheets-Sheet 1

Fig. 1

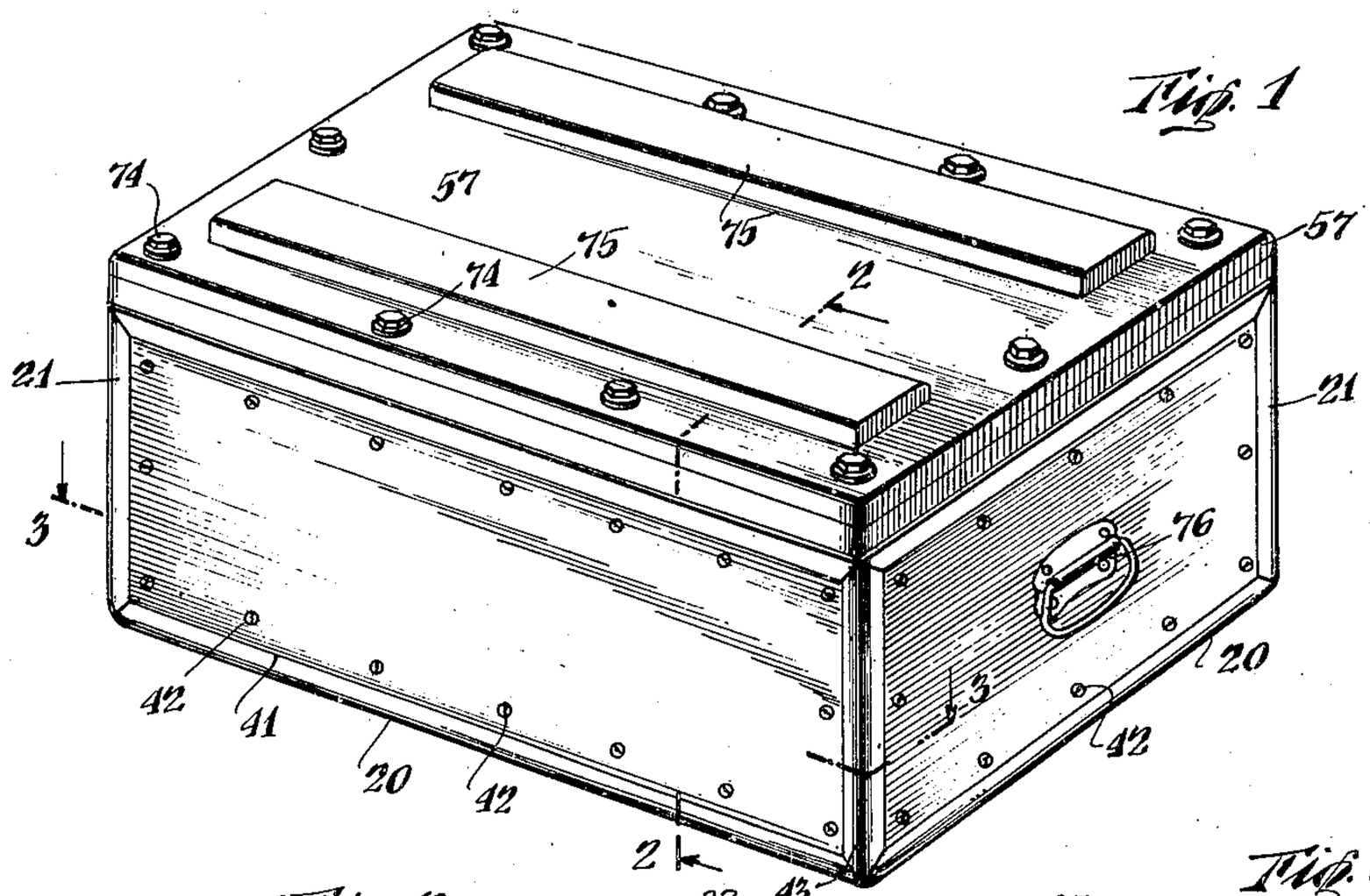

Fig. 2

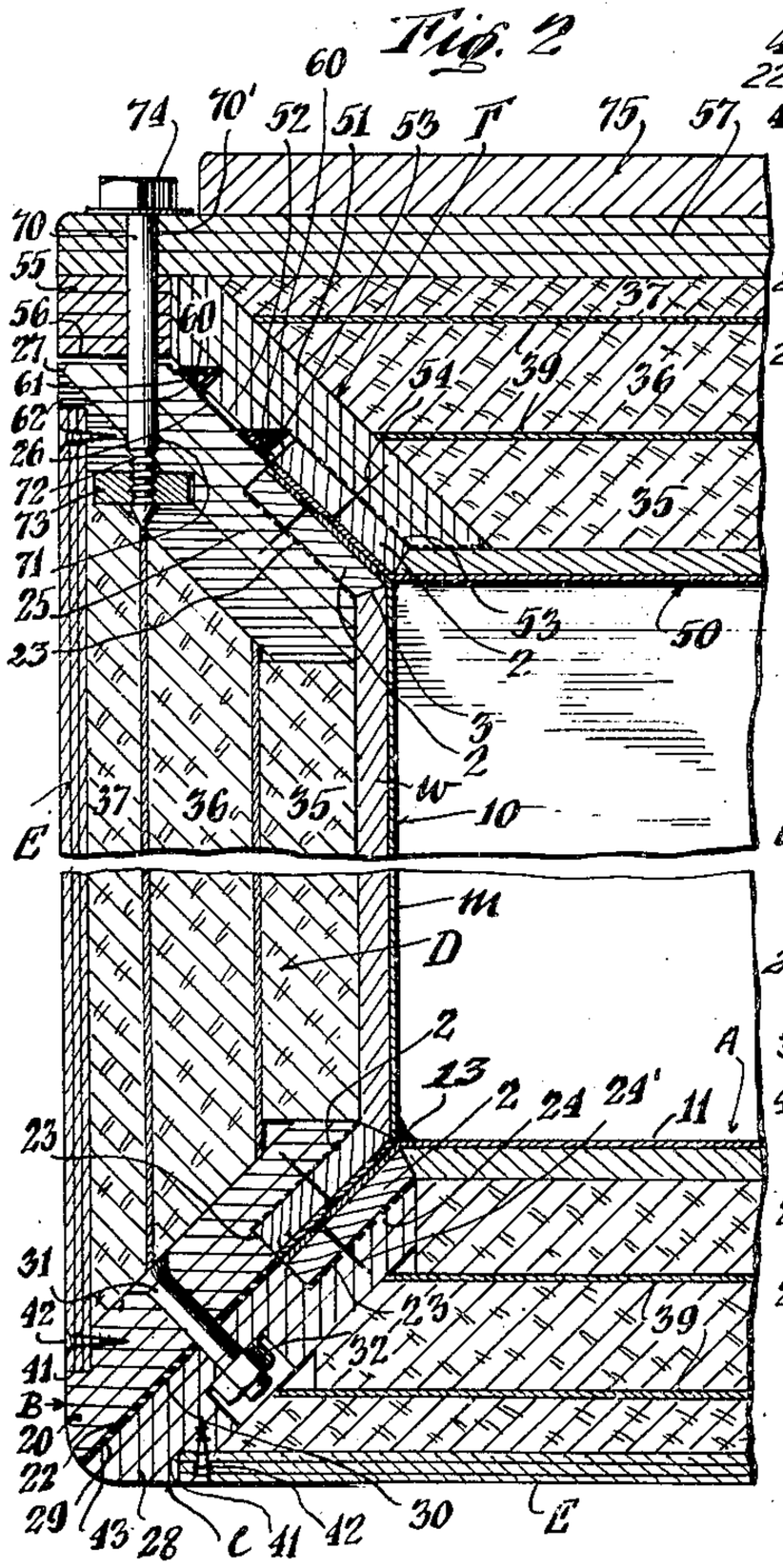

Fig. 3

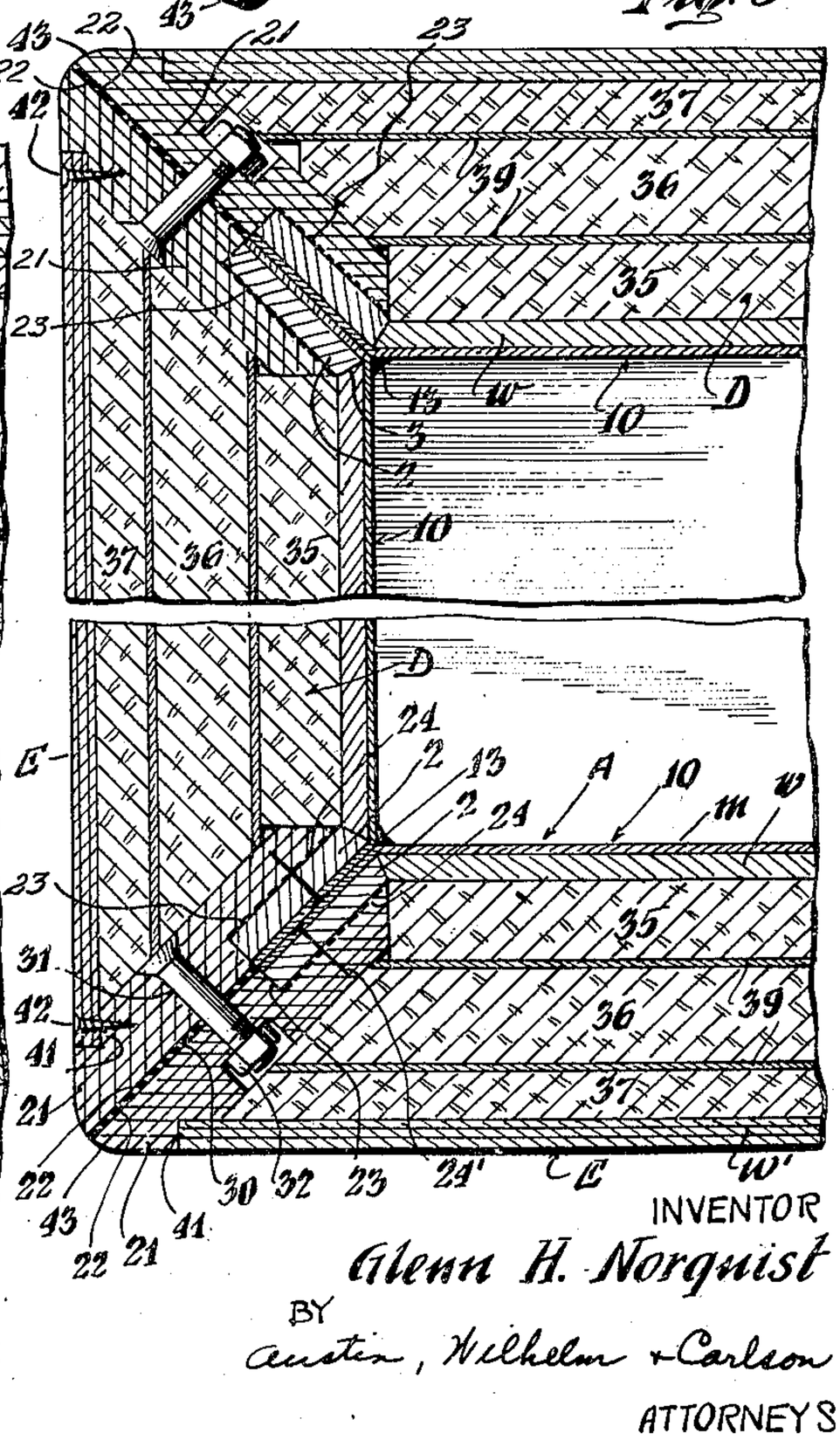

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Fig. 4

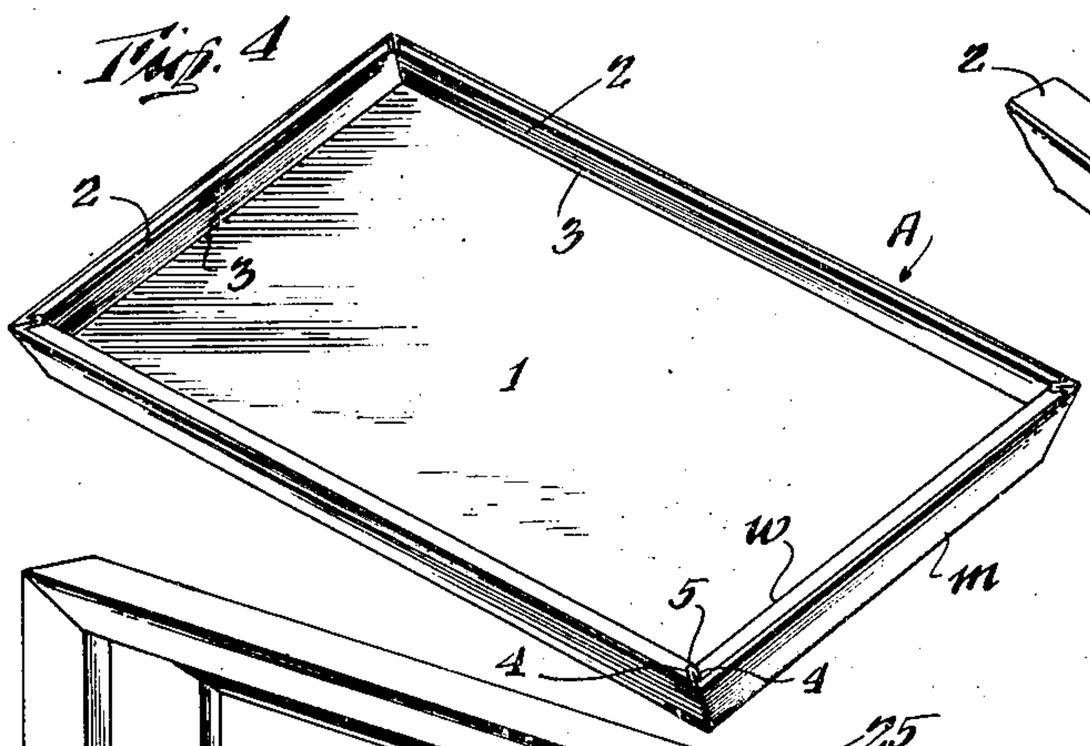
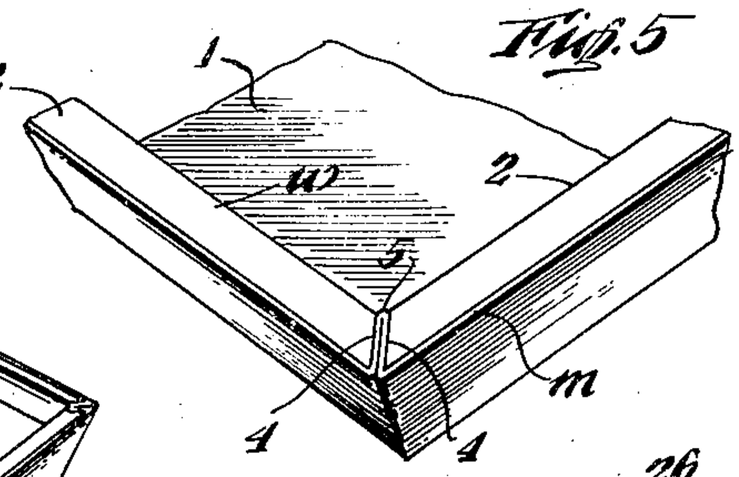


Fig. 5



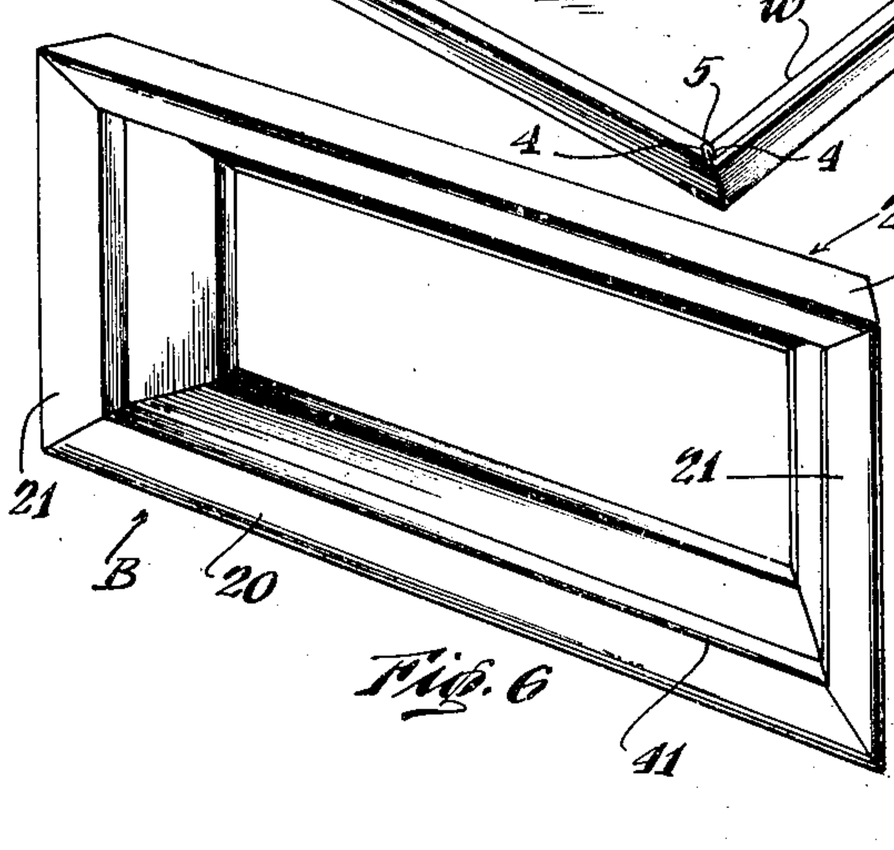


Fig. 6

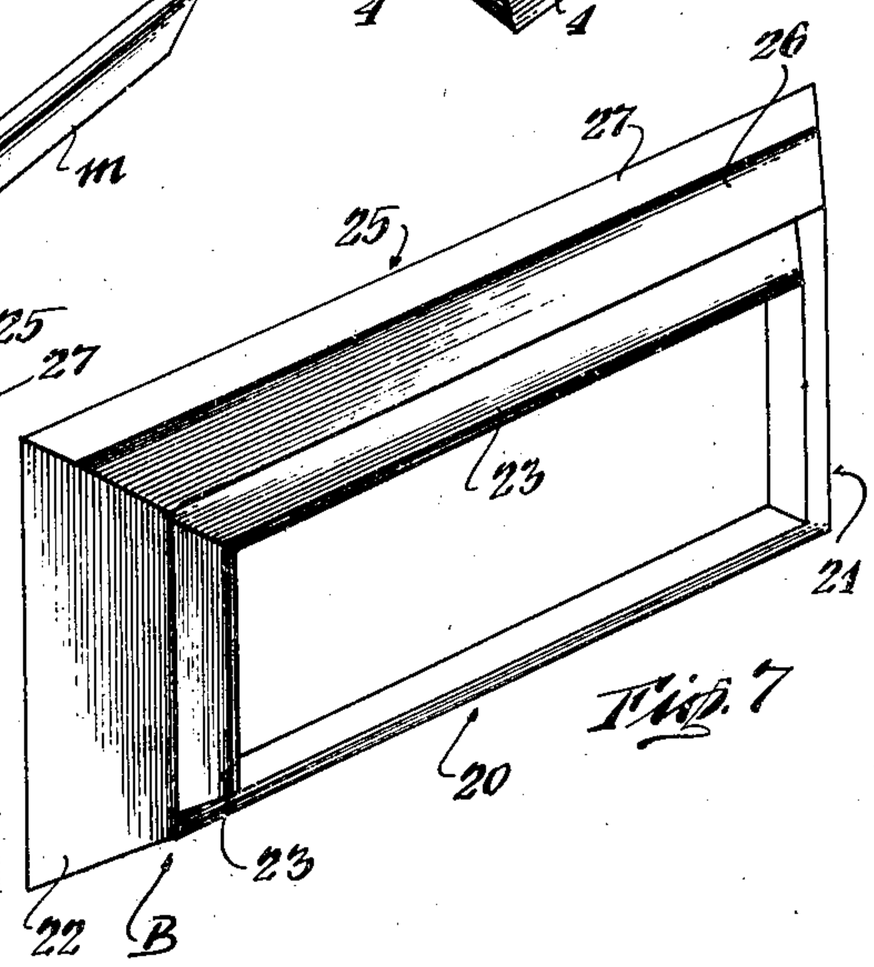


Fig. 7

Fig. 8

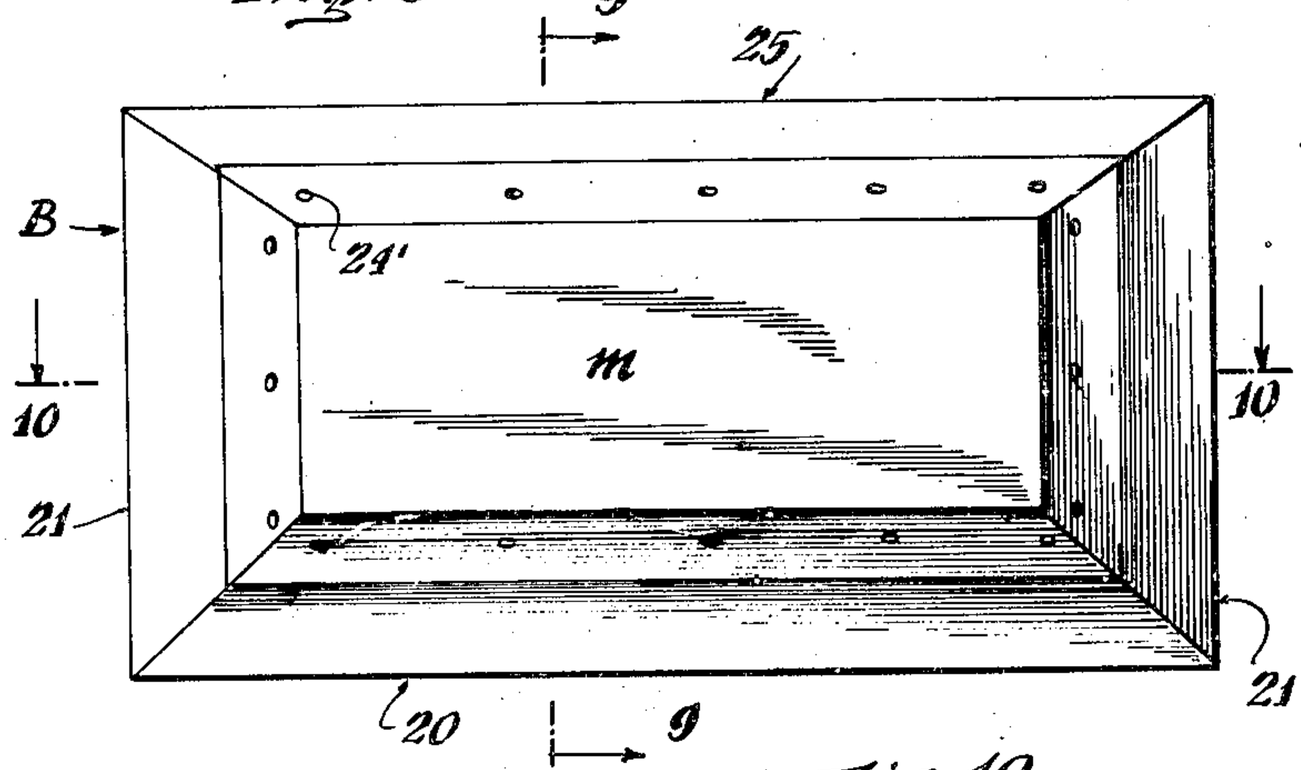


Fig. 9

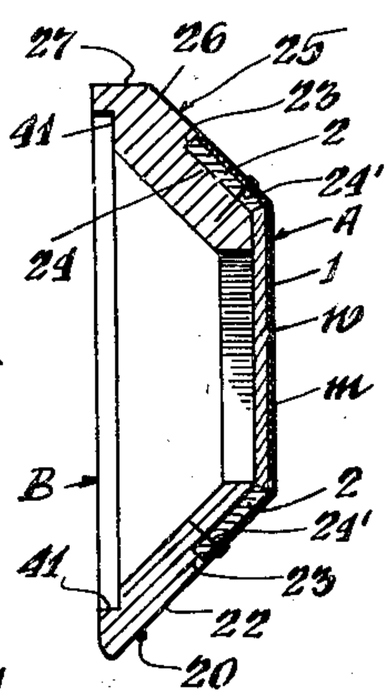


Fig. 10

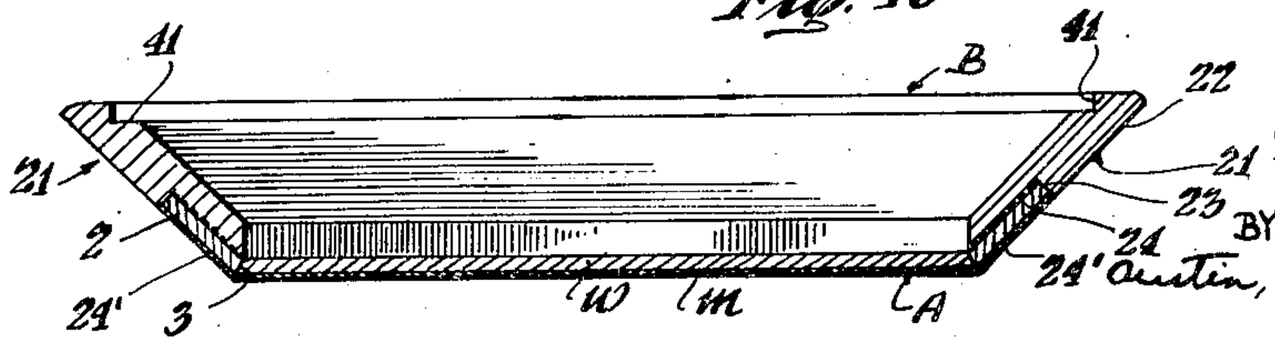


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Fig. 11

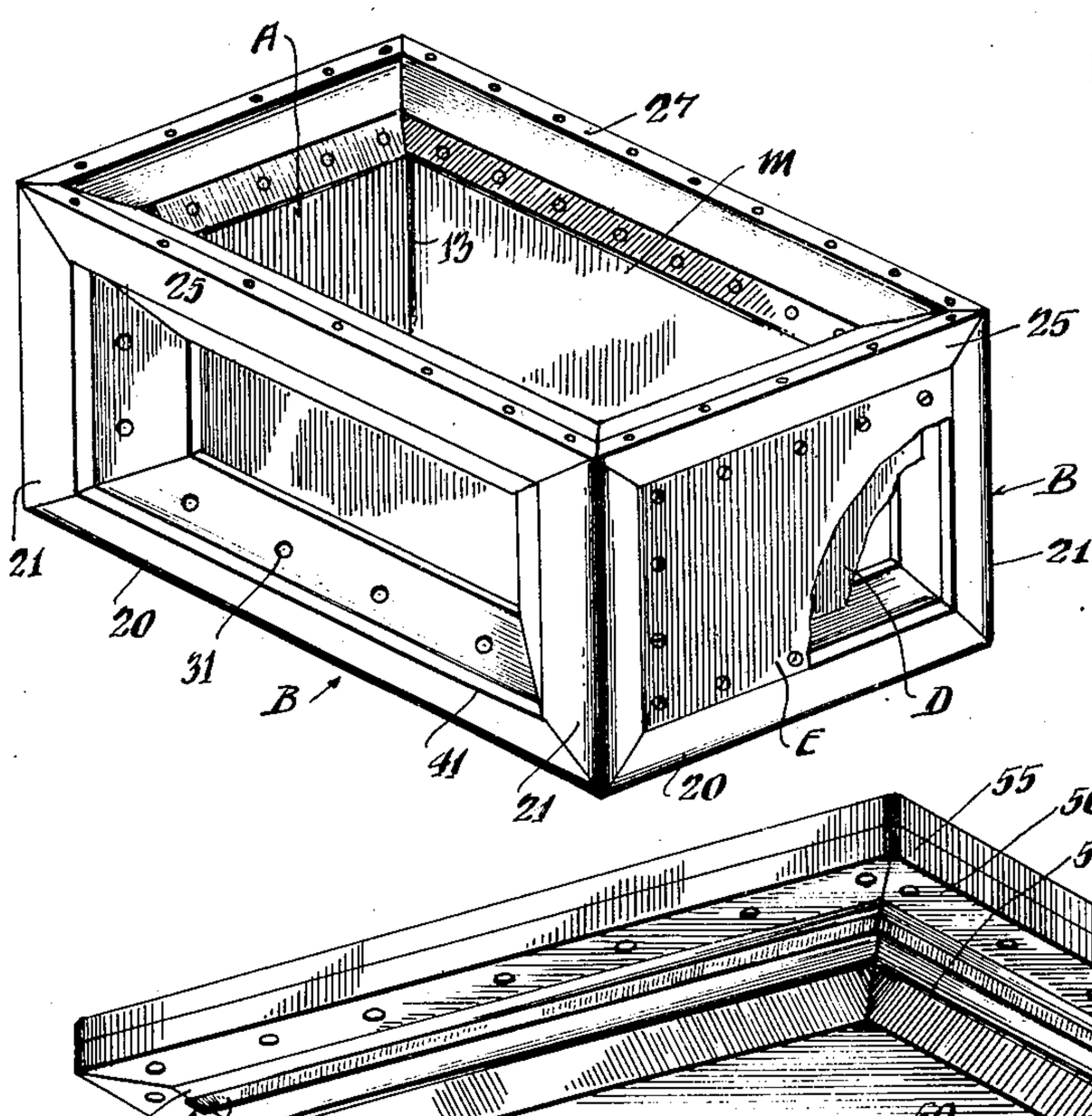

Fig. 12

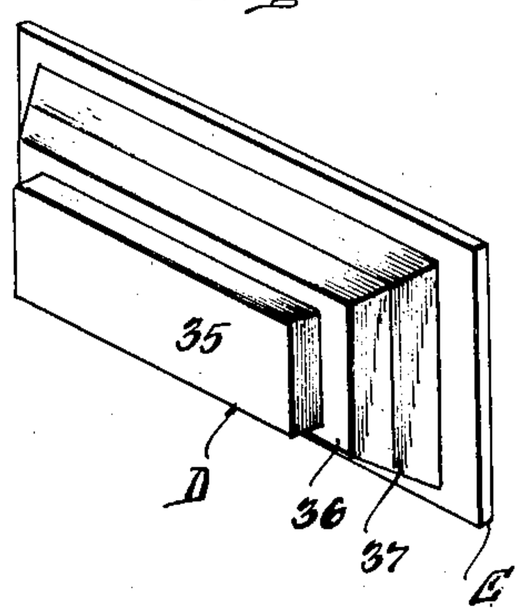

Fig. 13

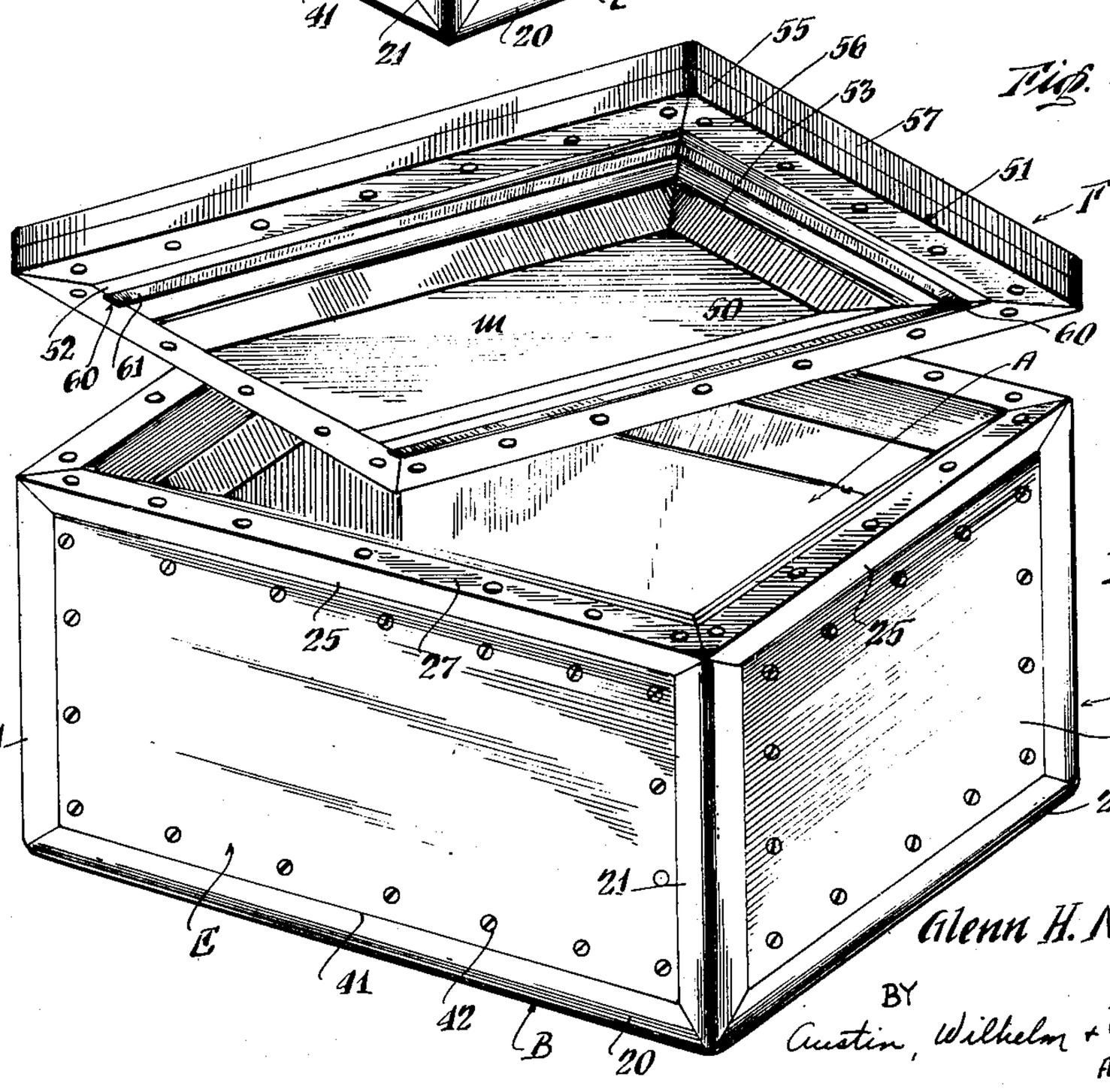

Fig. 14

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UNITED STATES PATENT OFFICE

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INSULATED CONTAINER STRUCTURE

Glenn H. Norquist, Jamestown, N. Y.

Application October 26, 1945, Serial No. 624,649

14 Claims. (Cl. 240—9)

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This invention relates to insulated container structures and more particularly to a container structure which is sturdy and lasting in construction, economical to assemble and construct, and which possesses improved insulating characteristics. This application is a continuation in part of my co-pending application Serial No. 601,214, filed June 23, 1945.

Insulated container structures have heretofore employed structural and other metal parts which extend between the inner and outer surfaces thereof, with the result that substantial heat transfer takes place through such highly thermal conductive metal parts, thereby greatly reducing the insulating efficiency of the structure. To maintain the interior of such container structures at the proper low temperature, refrigeration equipment and coolants have been used having a substantially larger cooling capacity, than would otherwise be required.

In accordance with this invention, an insulated container structure is provided wherein all metal parts extending between the exterior and interior surfaces thereof have been eliminated without sacrifice of strength or durability. The container structure essentially comprises an inner shell constructed of metal clad plywood panels assembled together to provide reinforcing flanges at the edges and corners thereof. The metal faces of these panels are arranged to form an air-tight metal liner for the shell interior which may be kept clean and sanitary.

The inner shell is enclosed within a strong insulating framework extending around the edges and corners of the inner shell. This framework supports the liner panels forming the inner shell and the insulating material packed within the framework. Cork or other insulating materials, either in loose or slab form, is packed against the outer wall surfaces of the inner shell and between and within the confines of the insulating framework. Plywood panels, which may be metal lined, provide a strong outer sheathing for the container and serve to contain the insulating packing between the sheathing panel and adjacent wall of the inner shell. The sheathing panels may be secured to the insulating framework in any suitable manner.

The container body may be conveniently assembled by formnig flanges around the edges of each metal clad plywood panel which is to form the bottom wall or side walls of the container, with the flanges extending at one angle of approximately 45° to the main section of the panel. The flanges of each panel are then secured to a

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strong insulating frame having facing edges so formed that the frames can be fitted and bolted together, providing a container body comprising an inner shell formed by the metal lined plywood liner panels encased within a framework extending around the edges and corners of the inner shell. Insulating material is then packed within each frame and enclosed therein by a sheathing panel attached to each frame. Solder or a welding alloy is used to cover the interior corners of the metal liner sheets to make the inner shell airtight.

The cover closure for the insulated container body is also constructed to resist heat transfer between the exterior and interior surfaces thereof. The cover closure as constructed comprises a metal clad liner panel having flanges secured to an insulating frame. Insulating material, either in slab or loose form, is sealed within the confines of the insulating frame and the metal clad liner panel by an outer plywood panel which is secured to the insulating frame. The cover frame is so constructed as to fit snugly on the inclined seating faces of the container body. One or more gasket rings may be secured around the periphery of the cover framework to provide an air-tight seal between the cover closure and cover seat associated with the container body. The closure cover is detachably secured to the container body by means of securing devices which insure an airtight seal between the cover and container body.

This improved insulated container structure presents no metal parts through which heat may be transferred between the inner and outer surfaces thereof. The insulating framework, the insulation packing and the outer plywood sheathing together provide an insulating blanket which completely encloses and surrounds the interior metal-lined container shell. This insulating blanket is so formed and assembled that no highly thermal conductive connection between the inner and outer surfaces of the completed container structure is presented.

Insulated container structures made in accordance with this invention may be formed in various shapes and sizes and for various uses, and may have associated therewith refrigerating equipment or coolants for maintaining the interior thereof at the desired low temperature. This invention is applicable to the design and construction of refrigerators for household and commercial establishments, and for cold storage rooms and deep freeze chests. Insulated containers constructed in accordance with this in-

vention are particularly adopted for the storage and shipment of various frozen products, such as frozen foods and the like, where Dry Ice may be employed to maintain the contents in the desired frozen condition for extended periods.

An object of this invention is to provide an improved insulated container structure which possesses unusually high insulating characteristics and which is so constructed as to resist to a maximum degree the transfer of heat between the interior and exterior surfaces thereof.

Another object of this invention is to provide an improved insulated container structure which is strong and sturdy in construction, relatively light in weight, and which can be manufactured and assembled at substantially less cost than insulated container structures as heretofore constructed.

Another object of this invention is to provide an improved insulated container structure having high insulating qualities, which presents a highly sanitary interior, which may be made pressuretight, and which can be constructed in various shapes, sizes and patterns for numerous and varied uses.

A further object of this invention is to provide an improved insulated container particularly adapted for the shipment and storage of various frozen products which comprises a substantially air-tight and sanitary interior shell encased and enclosed within an insulating framework and insulating packing possessing high insulating characteristics and low heat conductivity and wherein all heat conductive connections between the exterior and interior surfaces of the container structure have been eliminated.

Other objects and advantages of this invention will be come additionally apparent as the disclosure proceeds.

Although the characteristic features of this invention will be particularly pointed out in the claims appended hereto, the invention itself, and the manner in which it may be carried out, may be better understood by referring to the following description taken in connection with the accompanying drawings forming a part hereof, in which:

Fig. 1 is a perspective view of an insulated container made in accordance with the invention.

Fig. 2 is a fragmentary vertical cross sectional view of the container showing certain structural details of the walls thereof as the same appears when viewed along line **2—2** of Fig. 1.

Fig. 3 is a fragmentary horizontal cross sectional view of the container showing additional structural features thereof as the same appears when viewed along line **3—3** of Fig. 1.

Fig. 4 is a perspective view of one of the metal clad plywood panels used in the assembly of the inner shell of the container.

Fig. 5 is an enlarged fragmentary view of a corner portion of the metal clad panel shown in Fig. 4 illustrating particularly the corner reinforcing construction.

Fig. 6 is a front perspective view of an insulating frame to which a liner panel is attached.

Fig. 7 is a rear perspective view of the frame shown in Fig. 6.

Fig. 8 is a rear view of the frame shown in Figs. 6 and 7 after the flanged liner panel shown in Fig. 4 has been attached thereto.

Fig. 9 is a cross sectional view of the frame and liner panel assembly as the same appears when viewed along line **9—9** of Fig. 8.

Fig. 10 is another cross sectional view of the frame and liner panel assembly as it appears when viewed along line **10—10** of Fig. 8.

Fig. 11 is a partially assembled view of the container body showing the liner panel and frame assemblies secured together to provide a container body, one of the frames being shown filled with slabs of insulation retained in position by a sheathing panel secured to the frame, certain parts being broken away to illustrate structural details thereof.

Fig. 12 is an exploded view of the insulation slabs and sheathing panel before application thereof to one of the insulating frames of the container.

Fig. 13 is a perspective view of a fully assembled cover for the container body as viewed from the underside thereof; and

Fig. 14 is a perspective view of the fully assembled container body.

Similar reference characters refer to similar parts throughout the several views of the drawings and specification.

The improved insulated container made in accordance with this invention comprises an interior container shell A, constructed of laminated plywood having metal facing sheets bonded to the plywood and lining the interior thereof. The inner container shell is enclosed within an insulating framework, assembled from rectangular shaped side forming frames B and a rectangular shaped bottom forming frame C secured together to provide a rigid framework which extends around the edges and corners of the inner container shell. The bottom frame C and the side frames B, may be constructed of wood or plywood which possess a high insulated value. The bottom insulating frame C and the side insulating frames B are packed with insulating material D having a high insulating value. The insulating material D may comprise cork, insulating fibre, rock wool, porous rubber compositions, or other insulating materials of high insulating value. The insulating material D may be assembled within the insulating frames either in loose form or in slab form. The insulating material D is contained within the frames and protected by a sheathing panel E secured to the frames as by screws or other securing means.

The inner container shell A is constructed from a plurality of metal clad panels which have been suitably flanged and formed as illustrated in Figs. 4 and 5. Each of these panels are formed and shaped to the required size and comprise a base sheet *w* having a metal sheet *m* firmly and permanently cemented to one side thereof. The base sheet *w* is preferably formed of plywood or veneer layers bonded together by phenolic or urea resins, the metal surfacing sheet *m* also being bonded to the base sheet *w* by phenolic or urea resins. The metal sheet *m* greatly reinforces and strengthens the plywood and additionally provides a metal surface for the interior of the container.

Grooves **3** are cut in the base sheet so that side flange sections **2** are formed which extend approximately at an angle of 45° to the main section **1**. The corners of the base sheet are also notched out, but the metal sheet is uncut and unweakened at the corners. Each uncut corner section of the metal sheet is crimped and folded inwardly to provide an inturned plural ply reinforcing rib **5** as shown in Fig. 5, which is wedged between the ends **4** of the flange sections **2** of the base sheet. The inturned metal reinforcing ribs **5** measurably strengthen the corners of the container shell. A plurality of flanged metal clad

panels in the form shown in Fig. 4 are assembled together to form the side liner walls 10 and the bottom liner wall 11 of the shell body, with the flanges 2 thereof arranged in pairs, and with the metal faces of the paired flanges in overlapping relationship as shown in Figs. 2 and 3.

Each side frame B, as shown more particularly in Figs. 3, 6, 7, 8, 9, 10 and 11 are preferably constructed of wood or plywood frame members whose ends are mitered and secured together as by wood glue or screws. These framing members may comprise a bottom frame member 20 and side frame members 21 of similar cross section, and a top frame member 25 which may be of slightly different cross section to accommodate and provide a seat for the container cover constructed as hereafter described. The bottom frame member 20 and the side frame members 21 each present a flat face 22 and a groove 23 to snugly receive the adjacent flange section 2 of the side panel 10 in a manner so that the flat face 22 thereof is substantially flush with the metal face of the flange section 2 of the side panel 10 when seated within the groove 23. The top frame member 25 likewise has a flat seating face 26 and a groove 23 to receive the adjacent flange section 2 of the side wall liner panel 10 in a manner so that the flat face 26 and the metal face of the adjacent flange 2 are substantially flush. The top edge of the top frame member 25 has a flat seating face 27 to match with the corresponding seating face of the container cover.

In assembling the container the side wall liner panel 10 is fitted snugly over the side frame B with the flanges 2 of the panel snugly seated within the grooves or recesses 23 and with the plywood face of the panel flanges seating against the frame as shown in Figs. 8, 9 and 10. Wood glue or other strong adhesive 24 is used to firmly cement and secure the flange sections 2 to the framing members 20, 21 and 25, which securing means may be further supplemented by screws 24'. The side wall liner panel 10 and its associated side frame B thus present a dish shaped unit having an interior cavity or space of substantial depth for the reception of insulating material.

The bottom frame C is constructed of framing members 28 as shown more particularly in Fig. 2 which may have a cross section in all substantial respects similar to the bottom frame members 20 of the side frames B. The bottom frame members 28 have the adjacent ends thereof fitted and mitered together and secured as by adhesive or screws to provide a strong and rigid bottom frame. The bottom frame members 28 each present a flat face 29 and a groove 23 within which the adjacent flange section 2 of the bottom liner panel 11 snugly seats in a manner so that the flat face 29 of the frame member 28 is substantially flush with the metal face of the flange section 2 of the bottom liner panel 11. In assembling the container, the bottom liner panel 11 is fitted snugly over the bottom frame C with the flange sections 2 thereof snugly seated within the grooves or recesses 23 with the plywood face of the panel seating against the framing members. Wood glue or other strong adhesive 24 is used to firmly cement and secure the flange sections 2 to the framing member 28, which securing means may be further supplemented by screws 24'. The bottom liner panel 11 and its associated bottom frame C thus presents a dish shape unit having an interior cavity or space of substantial depth for the reception of insulating material.

The side wall units, each comprising a side wall liner panel 10 secured to a side frame B, are then assembled together into container form. It will be noted by referring more particularly to Fig. 3, that the flat faces 22 of side frame members 21 of each side frame unit are constructed and shaped so as to snugly match the adjacent flat faces 22 of adjacent side frame members 21 in close fitting engagement. If desired, a suitable insulating plastic 30 may be positioned between the adjacent flat faces 22 of the side frame members 21 to insure a tight joint between adjacent side frame members and thereby insure a high insulating efficiency. The adjacent side frame members 21 of the side frames are then bolted together by strong bolts 31, a sufficient number of spaced bolts being used to insure a strong and sturdy construction. Each bolt 31 is provided with a suitable adjusting nut 32 so that when the nuts are tightened the adjacent flat faces 22 of the adjacent side frame members 21 are drawn tightly together with the sealing and insulating plastic 30 sandwiched therebetween. It will also be noted that when the nuts 32 are tightened the adjacent paired flange sections 2 of the side wall liner panels 10 are rigidly clamped together with the metal facings thereof in tight surface to surface contact.

When the side wall units have thus been assembled and bolted together to provide the side enclosing walls of the container body, the bottom unit, comprising the bottom liner panel 11 secured to the bottom frame C, is then secured and attached to the bottom frame members 20 of the side frames B as illustrated more particularly in Fig. 2. It will here be noted that the flat faces 29 of the frame members 28 which form the bottom frame C are shaped to snugly match and interfit with the adjacent flat faces 22 of the bottom frame members 20 of the side frames C. A suitable insulating plastic 30 may be used to provide a tight joint therebetween. Clamping bolts 31 equipped with tightening nuts 32 are used to firmly secure the bottom frame members 28 of the bottom frame C to the adjacent bottom frame members 20 of the side frames B, a sufficient number of clamping bolts 31 being used to insure a strong and sturdy construction. The clamping bolts 31 when properly tightened serve to clamp the flange sections 2 of the bottom liner panel 11 to the adjacent flange sections 2 of the side liner panels 10 firmly together with the metal faces of these flange sections in tight surface contact.

The interior of the container body is made airtight by the application of a welding metal or solder 13 to the inside corner joints defined between the adjacent side liner panels 10, and the inside corner joints defined between the bottom liner panel 11 and the adjacent side liner panels 10. The welding alloy or solder 13 seals the metal liner sheets together and provides a leak-tight seal therebetween. Some of the molten solder will seep between the contacting metal surfaces of the paired flange sections 2 and thereby further secure the paired flange sections together in rigid assembly.

The side wall liner panels 10 and the bottom liner panel 11 thus welded or soldered together provide an air-tight inner shell A for the container body. The paired flange sections 2 of these panels, which also become soldered or welded together by the soldering or welding operation, provide an edging framework which further braces and strengthens the inner shell. The

bonded plywood base sheet possesses unusual stiffness and rigidity, and the liner sheet *m* gives the inner shell unusual tensile strength. The insulating side frames B and insulated bottom frame C bolted together by the clamping bolts **31**, together with the paired flange sections **2** of the liner panels, provide a framing construction for the inner shell of the greatest strength and amply sufficient to withstand and absorb all strains and stresses which may be imposed upon the finished container. As shown in Figs. 2 and 3 the clamping bolts **31** are completely out of contact with the liner sheets *m*, being separated therefrom by the intervening parts of the insulating framework. The clamping bolts **30** can be applied without difficulty or obstruction before the insulating material D or the sheathing panels E are applied.

When the side wall units and the bottom wall unit have thus been bolted and secured together to provide an inner container shell with the reinforcing framework secured to the paired flange sections of the inner shell, the frame interiors may be filled with any selected insulating material D. The insulating material, such as cork, rock wool, insulating fiber, or porous rubberous materials, as selected and desired, may be conveniently formed and applied in the form of one or more slabs of economical thickness. As illustrated in Figs. 2, 3, 11 and 12 of the drawings, three separate slabs **35**, **36** and **37** have been conveniently employed. A sheet of aluminum foil **39** is placed between the insulating slabs to thereby further enhance the insulating efficiency of the container walls.

No stresses or strains are imposed upon the insulating material filling, and insulating materials can therefore be selected and used which have high insulating values, irrespective of strength. The insulating material is enclosed and retained within each of the side frames B and the bottom frame C by a sheathing panel E. The sheathing panel E is preferably composed of a base sheet *w'* comprising plywood or veneer layers bonded together as by suitable phenolic or urea adhesive. The bottom frame member **20**, side frame members **21** and top frame member **25** which form the side frame B may be provided with a groove **41** to receive the outer edge of the sheathing panel E, the sheathing panel being secured to the adjacent frame member as by screws **42**. Similarly, the frame members **28** which comprise the bottom frame C may be provided with grooves **41** to receive the outer edge of sheathing panel E which is secured in place as by screws **42**. To enhance the appearance of the construction the exposed outer corner **43** of the frame members **20**, **21** and **28** may be given a rounded contour as shown more particularly in Figs. 2 and 3.

The container cover as shown more particularly in Figs. 1, 2 and 13 is formed from a metal clad plywood panel **50** of proper size and dimension and constructed similar to the metal clad plywood panel illustrated in Figs. 4 and 5 and heretofore described. The metal clad panel **50** is attached to a rectangular cover frame F formed from four insulating frame members **51** whose ends are mitered and fitted together, and then secured into the form of a rectangular frame as by adhesive or other securing means. Each of the frame members **51** as shown more particularly in Fig. 2 is provided with a flat face **52** adapted to snugly seat upon the flat seating face **26** of the adjacent frame member **25** of the adjacent side frame B. The inner end of each cover frame member **51** is provided with a groove **53** adapted to snugly receive the flange section **2** of the metal clad liner panel **50**. Each of the flange sections **2** of the liner panel **50** may be secured to the adjacent frame member **51** as by adhesive, or screws **54**, or both. Each of the frame members **51** has a laterally extending shoulder portion **55** provided with a flat face **56** adapted to seat upon the flat face **27** of the adjacent frame member **25** of the side frame C.

Insulating material D, which may comprise a plurality of insulation slabs **35**, **36**, and **37** separated by layers of aluminum foil **39**, are fitted within the cover frame F and if desired may be secured in position by a suitable bonding adhesive. A covering panel **57**, which may be formed of laminated plywood of sufficient thickness to provide the required strength is secured to the shoulder portions **55** of the frame members **51** and serve to enclose the insulating material within the frame.

One or more gasket rings **60**, formed of soft rubber, may be applied to the exterior flat face **52** of the cover frame members **51**. Each gasket ring **60** is preferably triangular in cross section with a corner thereof snugly set within a correspondingly shaped groove cut in the face **52** of the cover frame F and extending continuously therearound. By so shaping the gasket rings **60**, these rings can be bent smoothly around the corners of the cover frame F. Each of the gasket rings **60** is provided with a flat face **61** designed to snugly and tightly seat against the flat seating face **26** of the adjacent top frame member **25** of the adjacent side frame C. If desired, each of the gasket rings **60** may have a hollow center **62** therein.

The closure cover as thus constructed provides a maximum of insulation between the interior and exterior surfaces thereof, with no metal connecting parts therebetween. By the employment of two or more spaced rubber gasket rings **60**, a substantially air-tight fit can be obtained between the seating cover and the cover seating faces **26** of the container body. Any open space between the gasket rings **60** provides an insulating dead air space, which would not be objectionable from an insulating standpoint. It will be further noted that there is no metal connection at the joint between the closure cover and the container body which would provide a heat transfer medium between the inner and outer surfaces of the container, when the closure cover is in closed position.

Any desired means may be used to releasably secure the closure cover in leaktight position to the container body. Where the cover is to be only occasionally removed, a latching assembly, as illustrated in Figs. 1 and 2, may be employed for this purpose. The latching assembly here illustrated comprises a series of spaced bolts **70** which project through fitted holes **70'** extending through the top panel **57** and the shoulder section **55** of the cover and into aligned fitted holes **71** extending into the top frame member **25** of the side wall frames B. The lower end of each bolt **70** is provided with threads **72** which are adapted to thread into a fixed nut **73** buried in the frame member **25** in a snug cavity provided therefor. Each bolt **70** is provided with a suitable head **74** to which a wrench or other tool may be applied to manipulate the locking bolt. The top panel **57** may be provided with suitable cross slats **75** so that the containers may be

stacked together in a sturdy manner without interference from the bolt heads 74. Suitable handles 76 may be provided for lifting the container.

While one form of latching device has been illustrated, it will be appreciated that other latching and securing means may be provided to secure the closure cover in tight sealing position upon the container body. It will also be appreciated that the closure cover may be suitably hinged by various hinging devices to the container body and various latching or securing devices used to releasably secure the closure cover in closed and sealed position. The closure cover may be of such shape and size as to constitute only a fractional part of one of the walls of the container structure and the container structure may be provided with two or more closures of any desired size and shape.

Container structures may be constructed in accordance with this invention in various sizes and shapes to provide refrigeration boxes for household and commercial establishments, cold storage rooms and compartments, and containers in which frozen foods and other products may be contained and shipped. The insulating features embodied in this invention may be applied to container structures, either stationary or movable, which may be constructed at relatively low cost and with the attainment of maximum insulating values for the materials used.

It is understood that various modes and methods of applying the principles of this invention may be employed, change being made in regard to details required by the particular application, and that changes and modifications in the form, construction and arrangement and combination of the several parts may be made and substituted for those herein shown and described without departing from the principles of this invention.

What is claimed is:

1. An improved insulated container structure including in combination, a plurality of liner panels each comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, said liner panels having the adjacent flanges thereof arranged in pairs whereby said liner panels form an inner shell for said container structure, bonding metal filling the interior joints between adjacent liner sheets providing a substantially air-tight inner shell, a plurality of wall forming frames interfitting with one another and presenting cavities to snugly receive and contain the paired flanges of said inner shell, means exterior to said paired flanges for firmly securing said frames together to provide a reinforcing framework for the container structure, a plurality of layers of insulating material packed within the confines of said framework, and insulating foil interleaved between said insulating layers.

2. An improved insulated container structure including in combination, a plurality of liner panels each comprising a plywood base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, said liner panels having the adjacent flanges thereof arranged in pairs whereby said liner panels form an inner shell for said container structure, bonding metal filling the interior joints between adjacent liner sheets providing a substantially air-tight inner shell, a plurality of wall forming frames interfitting with one another and presenting cavities to snugly receive and contain the paired flanges of said inner shell, tie bolts exterior to said paired flanges for firmly securing said frames together to provide a reinforcing framework for the container structure, a plurality of layers of insulating filler packed within the confines of said framework, insulating foil interleaved between said insulating layers, and plywood sheathing panels secured to said framework and confining the insulating filler therein.

3. An improved insulated container structure including in combination, a plurality of liner panels each comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, said liner panels having the adjacent flanges thereof arranged in pairs whereby said liner panels form an inner shell for said container structure, bonding metal filling the interior joints between adjacent liner sheets providing a substantially air-tight inner shell, insulating frames presenting recessed cavities encasing and enclosing the paired flanges of said inner shell, securing means positioned out of contact with said liner sheets for firmly attaching said insulating frames together to provide an insulating framework extending around the edges and corners of said inner shell, and insulating filler packed within the confines of said frames, said insulating filler comprising porous insulating filler material having a surface sheathing of insulating foil.

4. An improved insulated container structure including in combination, a plurality of liner panels each comprising a plywood sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, said liner panels having the adjacent flanges thereof arranged in pairs whereby said liner panels form an inner shell for said container structure, bonding metal filling the interior joints between adjacent liner sheets providing a substantially air-tight inner shell, insulating frames presenting recessed cavities encasing and enclosing the paired flanges of said inner shell, securing means positioned out of contact with said liner sheets for firmly attaching said insulating frames together to provide an insulating framework extending around the edges and corners of said inner shell and serving to clamp the paired flanges of said inner shell together in integral assembly, insulating filler packed within the confines of said frames, said insulating filler including porous insulating material sheathed with sheets of insulating foil, and plywood sheathing panels secured to said frames confining the insulating filler therein.

5. An improved insulated container structure comprising, a container body and a closure cover therefor, said container body including an inner container shell presenting interior wall sections and laterally extending flange sections, an exterior framework encasing said flanges, filler packed within the confines of said framework, and exterior sheathing panels secured to said framework, said closure cover including an interior liner panel presenting a wall section and laterally flared flange sections, a cover frame having an exterior groove within which the flange sections of said liner panel are nested and secured, filler packed within the confines of said cover frame, a sheathing panel secured to said cover frame and confining the filler therein, said closure cover having an inclined seating face and a horizontal seating face adapted to snugly seat upon corresponding inclined and horizontal seat-

ing faces forming a part of said container body, and means for securing said closure cover to said container body.

6. An improved insulated container structure comprising, a container body and a closure cover therefor, said container body including an inner container shell presenting interior wall sections and laterally extending flange sections, an exterior framework encasing said flanges, filler packed within the confines of said framework, and exterior sheathing panels secured to said framework, said closure cover including an interior metal liner exteriorly reinforced by fibrous sheathing having laterally flared flange sections, a cover frame having an exterior groove within which the flange sections of said liner panel are nested and secured, insulating filler packed within the confines of said cover frame, a sheathing panel secured to said cover frame and confining the insulating filler therein, said closure cover having an inclined seating face and a horizontal seating face adapted to snugly seat upon corresponding inclined and horizontal seating faces forming a part of said container body, and means for securing said closure cover to said container body.

7. An improved insulated container structure comprising, a container body and a closure cover therefor, said container body including an inner container shell having an interior metal liner exteriorly stiffened and reinforced by fibrous sheathing and laterally extending flanges, an exterior framework of low thermal conductivity encasing said flanges, insulating filler packed within the confines of said framework, and exterior sheathing panels secured to said framework, said closure cover including an interior metal liner exteriorly reinforced by fibrous sheathing having laterally flared flanges, a cover frame of low thermal conductivity having an exterior groove within which the flange sections of said liner panel are nested and secured, insulating filler packed within the confines of said cover frame, a sheathing panel secured to said cover frame and confining the insulating filler therein, said closure cover having an inclined seating face and a horizontal seating face adapted to snugly seat upon corresponding inclined and horizontal seating faces forming a part of said container body, a gasket ring for sealing said closure cover to the closure seat of said container body, and means for securing said closure cover to said container body.

8. A container structure including in combination, a plurality of liner panels forming the inner walls of the structure, each of said panels comprising a fibrous base sheet presenting a wall section and laterally flared flange sections, a framework including a plurality of panel frames, each of said panel frames being formed of frame members fitting over the flange sections of its associated liner panel, the adjacent frame members of adjacent panel frames presenting adjacent facing portions, insulating sealing material sandwiched between the adjacent facing portions of adjacent frame members, a groove formed in said adjacent frame members snugly receiving the adjacent paired flange sections of adjacent panels, and means exterior of the paired flange sections for securing said frames together in rigid assembly to provide a reinforcing framework for the container structure.

9. An insulated container structure including in combination, a plurality of liner panels each comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, a frame formed of frame members of low thermal conductive material each having an exterior face portion and an exterior groove, means for securing the flange sections of each liner panel in seating position within the exterior groove of the associated frame to provide a rigidly assembled framed liner panel, the adjacent frame members of adjacent framed panel units presenting the face portions thereof in close contiguous relationship, means exterior of the adjacent paired flange sections for securing said framed panel units together in rigid assembly to provide a reinforcing framework for the container structure, and insulating material packed within the confines of said framework.

10. An insulated container structure including in combination, a plurality of liner panels forming the inner walls of the structure, each of said panels comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, a frame formed of frame members of low thermal conductive material secured to the flange sections of each of said liner panels, the adjacent frame members of adjacent panel frames having face portions in substantially face-to-face abutment, a groove formed in said adjacent frame members snugly receiving the adjacent paired flange sections of adjacent panels, means exterior of said panel flanges for securing said frames together in rigid assembly to provide a reinforcing framework for said container structure, a plurality of layers of insulating material packed within the confines of said framework, insulating foil interleaved between said insulating layers, and sheathing panels secured to said framework confining the insulating material therein.

11. A container structure including in combination, a plurality of liner panels each presenting a wall section and laterally flared flange sections, a rigid frame having an exterior groove encasing the flange sections of each liner panel, means for securing the flange sections of each liner panel snugly nested in the grooves of its frame to provide a rigidly assembled framed liner panel unit, the adjacent frames of the framed liner panel units as assembled presenting adjacent face portions exterior of the flange sections of the liner panels, insulating sealing material sandwiched between the adjacent face portions of the framed liner panel units, and means exterior of the flange sections of the liner panels for securing said frames together in rigid assembly to provide a reinforcing framework for the container structure.

12. An insulated container structure including in combination, a plurality of liner panels forming the inner walls of the structure, each of said panels comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, the adjacent flange sections of adjacent panels being in substantially face-to-face abutment, a framework encasing the flange sections of said liner panels, said framework including a frame for each of said panels, each of said frames comprising connecting frame members of low thermal conductive material secured to the flange sections of its associated liner panel, the adjacent frame members of adjacent panel frames presenting face portions, insulating sealing material sandwiched between the adjacent face portions of adjacent frame members, a groove formed in said adjacent frame members snugly receiving the

adjacent paired flange sections of adjacent panels, means exterior of said flange sections for securing the adjacent frame members together in rigid assembly, insulating material packed within the confines of said framework, and an insulating foil sheeting covering said insulating material.

13. An insulated container structure including in combination, a plurality of liner panels each comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, a frame for each of said panels, each said frames comprising connected frame members of low thermal conductive material presenting an exterior groove snugly receiving the flange sections of its associated liner panel, means for securing the flange sections to said frame to provide a rigidly assembled framed panel unit, the adjacent frame members of the framed panel units as assembled presenting contiguous facing portions, insulating sealing material sandwiched between said contiguous facing portions to provide a sealed joint therebetween, securing means exterior to said paired flange sections for attaching the adjacent frame members together in rigid assembly, insulating material packed within the confines of said frames, and sheathing panels secured to said frames confining the insulating material therein.

14. An improved insulated container structure including in combination, a plurality of liner panels each comprising a fibrous base sheet cemented to a metal liner sheet presenting a wall section and laterally flared flange sections, a rigid insulating frame presenting cavities snugly receiving the flange sections of the liner panel, means for securing the flange sections of the liner panel to its associated frame to provide a rigidly assembled framed liner panel unit, the frame of each framed panel unit interfitting with one another when the panel units are assembled, means exterior to the flange sections of the liner panels for firmly securing said panel frames together to provide a reinforcing framework for the container structure, and insulating material packed within the confines of said panel frames.

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