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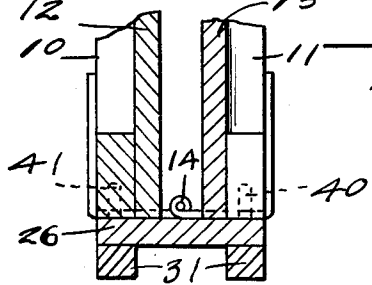
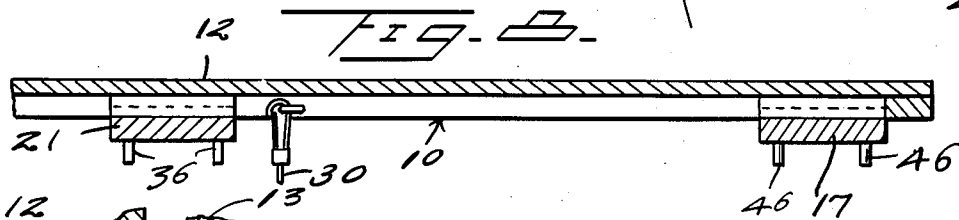
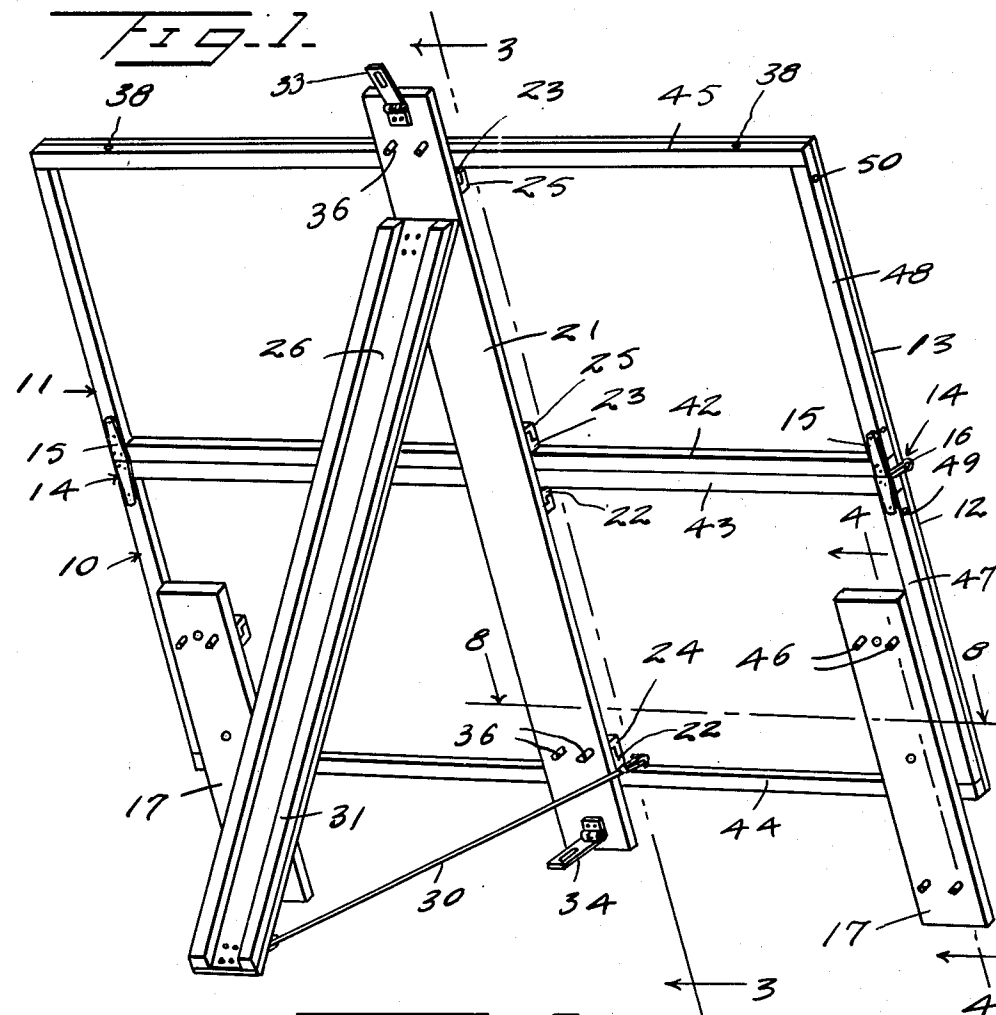
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2,641,431

KNOCKDOWN DISPLAY STRUCTURE

Filed March 20, 1950

4 Sheets-Sheet 1



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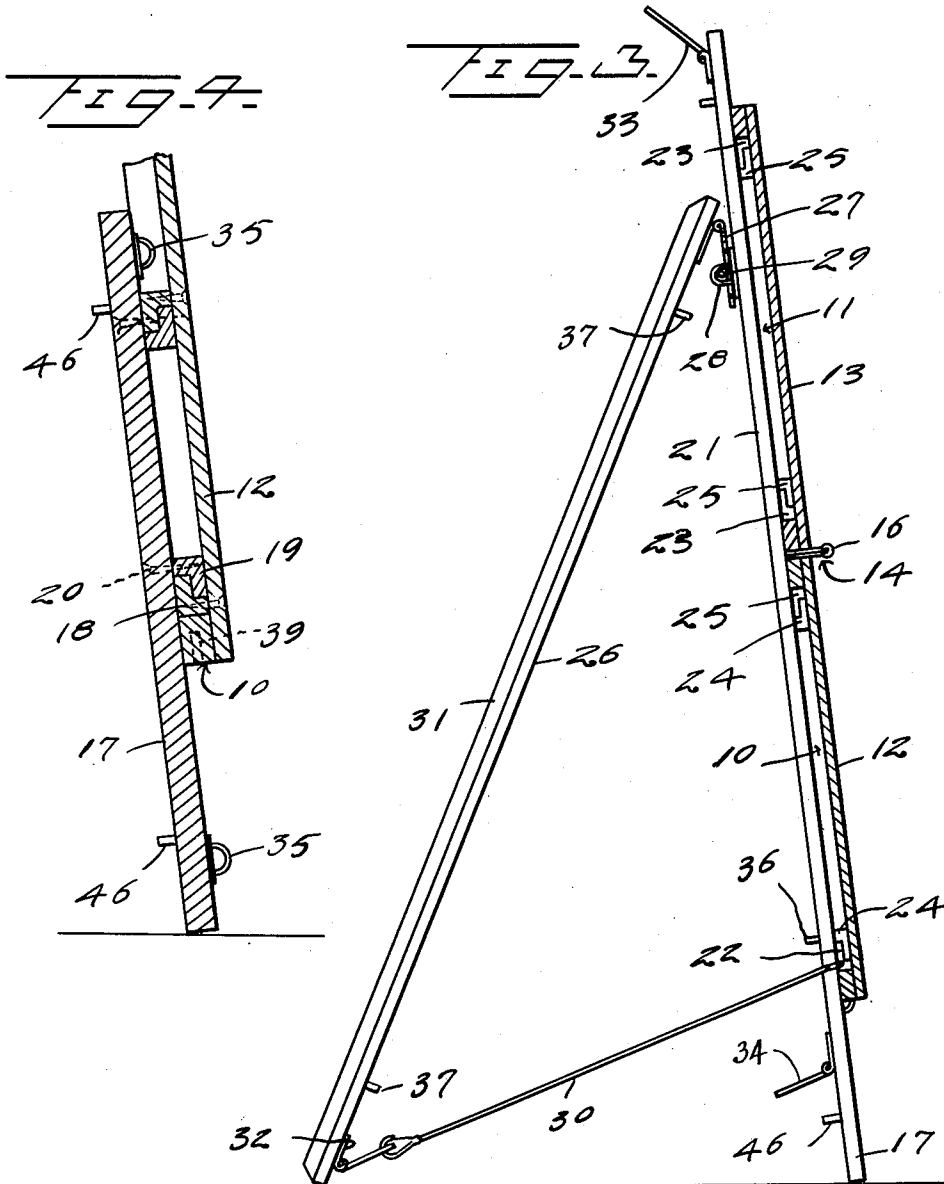
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KNOCKDOWN DISPLAY STRUCTURE

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4 Sheets-Sheet 2



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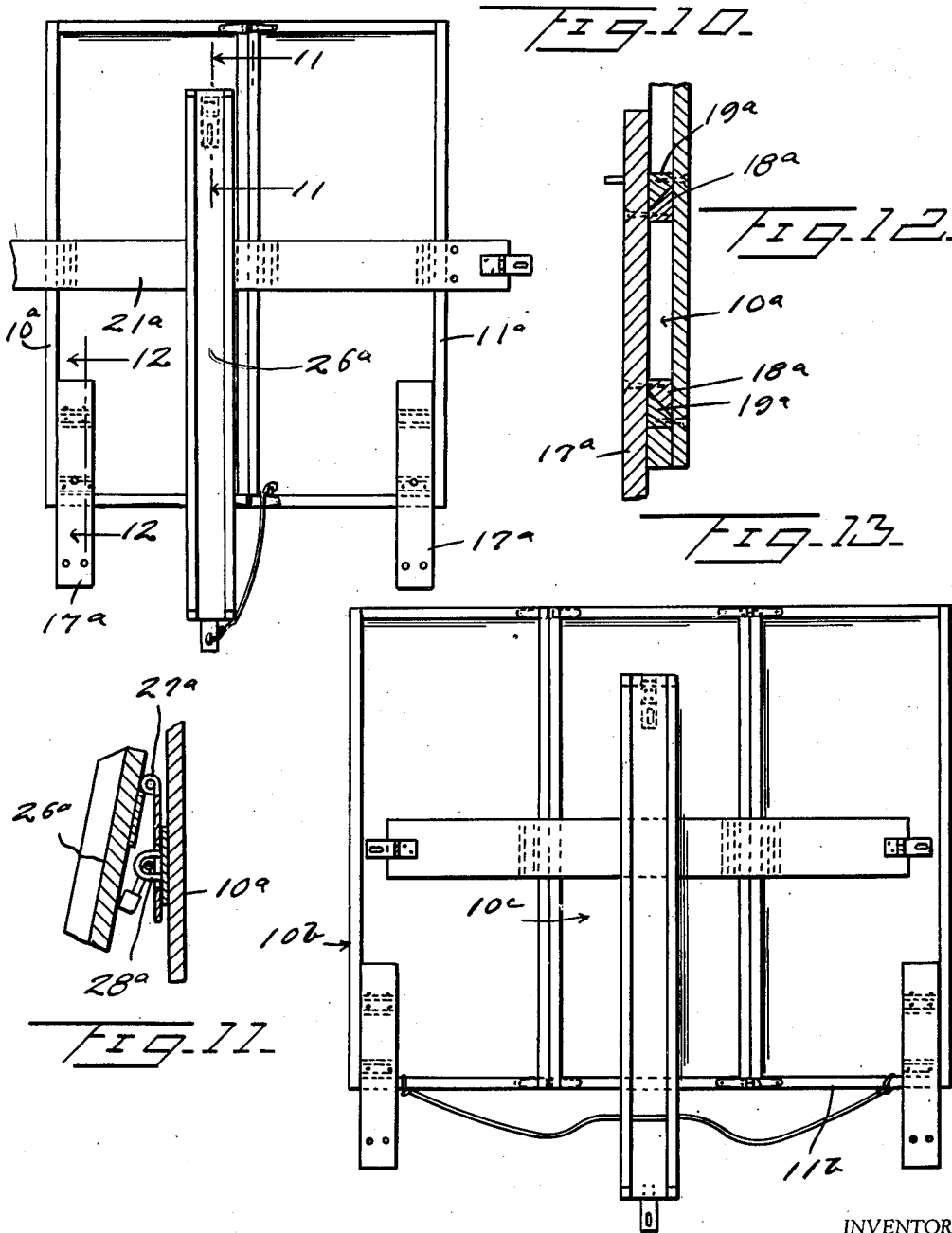
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KNOCKDOWN DISPLAY STRUCTURE

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4 Sheets-Sheet 4



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KNOCKDOWN DISPLAY STRUCTURE

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2 Claims. (Cl. 248-197)

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This invention relates to a knockdown display structure.

An object of this invention is to provide a display structure having a hinged display board and tripod forming means detachably secured to the back of the board, the tripod forming means with a back stiffening brace cooperating with the collapsed board in producing a closed crate.

Another object of this invention is to provide a collapsible display stand wherein certain elements of the stand provide a locking means for locking the board supporting means together and about the collapsed board so as to thereby form a crate or case, the legs and brace protecting the edges of the board.

A further object of this invention is to provide a collapsible display system upon which is a display structure consisting of one, two or more individual boards so hinged as to open up into a flat surface.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings,

Figure 1 is a perspective view from the rear of a display stand constructed according to an embodiment of this invention.

Figure 2 is a perspective view of the display structure in knocked down and shipping form.

Figure 3 is a sectional view taken on the line 3-3 of Figure 1.

Figure 4 is a sectional view taken on the line 4-4 of Figure 1.

Figure 5 is a fragmentary end elevation of the display structure in collapsed shipping form.

Figure 6 is a sectional view taken on the line 6-6 of Figure 5.

Figure 7 is a fragmentary sectional view taken on the line 7-7 of Figure 6.

Figure 8 is a fragmentary sectional view taken on the line 8-8 of Figure 1.

Figure 9 is a fragmentary sectional view taken on the line 9-9 of Figure 2.

Figure 10 is a detail rear elevation of a modified form of this invention.

Figure 11 is a fragmentary sectional view taken on the line 11-11 of Figure 10.

Figure 12 is a fragmentary sectional view taken on the line 12-12 of Figure 10.

Figure 13 is a detail rear elevation of another modification of this invention.

Referring to the drawings, the numerals 10 and 11 designate generally a pair of panel frames

which are of rectangular configuration and which have panels 12 and 13 secured to the forward sides thereof. The two frames 10 and 11 are hinged together by means of hinges 14, which are each formed with L-shaped leaf members 15. The hinge members 14 have the barrels 16 thereof projecting forwardly of the panels 12 and 13 so that when the panels are collapsed a substantial space will be provided between the collapsed panels.

In order to provide a means whereby the panel frames 10 and 11 with the panels 12 and 13 secured thereto may be held in display position, I have provided a pair of leg members 17 which are formed of flat rectangular boards or strips. The rear side of panel member 12 has secured thereto a pair of oppositely disposed L-shaped lock members 18, and the forward side of each leg member 17 has secured thereto complementary L-shaped lock members 19 which are adapted to engage with the lock members 18. The L-shaped lock members 19 are firmly secured to the leg members 17 by fastening means 20.

A bracing bar 21 is disposed on the rear sides of the panel frames 10 and 11 and is locked thereto by means of pairs of L-shaped locking members 22 and 23 which are secured to the rear faces of the panels 12 and 13. The forward side of the bracing bar 21 has secured thereto pairs of L-shaped lock members 24 and 25 which are adapted to engage with the lock members 22 and 23 respectively.

A leg bar 26 is pivotally secured to the bracing bar 21 by means of a hinge hasp 27 which engages with a keeper 28 secured to the bracing bar 21. A locking pin or snap 29 is extended through the keeper 28 as shown in Figure 3 so as to lock the hasp 27 on the keeper 28. The leg member 26 is braced against outward movement by means of a flexible bracing member 30 which is secured to the lower panel frame 10 and to the lower hasp or hinge member 32 which is secured to the lower end of leg member 26.

The leg member 26 has secured to the opposite lengthwise edges runners 31. Hinges or hasp members 33 and 34 are secured adjacent the opposite ends of the bracing bar 21. Each leg member 17 has secured to the forward side thereof a pair of looped keepers 35 which are engageable with adjacent hasp members at the time the display member is collapsed and set up for shipment.

The brace member 21 has extending from the rear side thereof pairs of dowel pins 36 and the

leg member 26 also has secured to the forward side thereof dowel pins 37. The upper longitudinal edge of panel frame 11 is formed with a pair of dowel sockets 38 and the lower bar of panel frame 10 is provided with a pair of dowel sockets 39. Similar dowel sockets 40 and 41 are formed in the bars 42 and 43 of panel frames 10 and 11.

Referring now to Figures 10, 11 and 12, there is disclosed a modified form of this invention wherein the panel frames 10a and 11a are vertically disposed. A bracing bar 21a extends horizontally across the panel frames and is locked thereto by means of angle-shaped locking members. Leg members 17a are secured to the panels by means of angle-shaped locking members 18a and 19a. A pivoted leg 26a is detachably secured to the center of brace 21a by means of a hasp 27a engaging a keeper 28a secured to panel 10a.

In Figure 13 there is disclosed another modification of this invention embodying an outer pair of panel structures 10b and 11b with an intermediate structure 10c hingedly secured therebetween. The hinges between panel structures 10b and 10c are arranged so that panel structure 10c will swing against the front side of panel structure 10b, whereas panel structure 11b will swing against the rear side of panel structure 10c when the panel structures are collapsed. In other respects the structure shown in Figure 13 is similar to that shown in Figures 10 to 12.

In the collapsing of the display structure, the legs 17 are removed by sliding the leg members 17 inwardly to unlock the locking members 19 from the locking members 18. The bracing bar 21 is also unlocked from the lock members 22 and 23 and the bracing cord 30 is removed from the lower bar 44 of panel frame 10. The leg 26 is disconnected from the bracing bar 21 by removing the locking pin or snap 29. The two panel frames 10 and 11, with the panels 12 and 13 respectively secured thereto are then swung upwardly with the hinges 14 lowermost. The leg member 26 is then secured to the panel bars 42 and 43 by extending the dowels 37 into the dowel sockets 40 and 41 as shown in Figure 9.

The bracing bar 21 is secured to the bars 44 and 45 of the panel frames 10 and 11 by extending the dowels 36 into the dowel sockets 38 and 39. The legs 17 which are also formed with pairs of dowels 46 are secured to the end bars 47 and 48 of the panel frames 10 and 11 by extending the dowels 46 into dowel sockets 49 and 50 which are formed in the end bars 47 and 48. The hasps 32 are then swung upwardly and engaged over the lower keepers 35 and locked thereto by any suitable locking means. The hasps 34 are swung downwardly over the outer sides of the leg members 17 and engaged over the upper keepers 35 and locked thereto by any suitable locking means.

When the display unit is knocked down and ready for shipment, this unit will assume the configuration shown in Figure 2. At this time the two panels 12 and 13 will be innermost so that

they will not be damaged or otherwise smudged during shipment and the leg members, together with the bracing bar, will provide a protecting frame structure for the collapsed panel display means.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claims.

What I claim is:

1. A knockdown display unit comprising a plurality of hingedly secured together panels, an elongated brace, inter-engaging locking means carried by the rear of said panels and the forward side of said brace for detachably securing said brace to said panels to thereby hold the latter in open, operative edge-aligned position, a pair of legs, inter-engaging locking means carried by said legs and an associated panel for detachably securing said legs to said associated panel, an intermediate leg, means hingedly securing said intermediate leg to the upper portion of said brace, means limiting the angular adjustment of said intermediate leg relative to said brace, and correlated means carried by said legs, said brace and the marginal portions of said panels for securing said legs and brace about the marginal portions of said panels when the latter are in folded collapsed position.

2. A knockdown display unit comprising a plurality of hingedly secured together panels, an elongated brace, inter-engaging locking means carried by the rear of said panels and the forward side of said brace for detachably securing said brace to said panels to thereby hold the latter in open, operative edge-aligned position, a pair of legs, inter-engaging locking means carried by said legs and at least one of said panels for detachably securing said legs to said panel, an intermediate leg, means hingedly securing said intermediate leg to the upper portion of said brace, means limiting the angular adjustment of said intermediate leg relative to said brace, pairs of spaced apart dowels carried by said legs and braces, said panels having dowel sockets in the marginal edges thereof in which said dowels are adapted to engage when said panels are in folded position, loops carried by said pair of legs, and hinged hasps carried by the opposite ends of said brace and said intermediate leg engageable with said loops whereby said legs and brace may be locked about the marginal portions of said panels.

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