

Oct. 25, 1949.

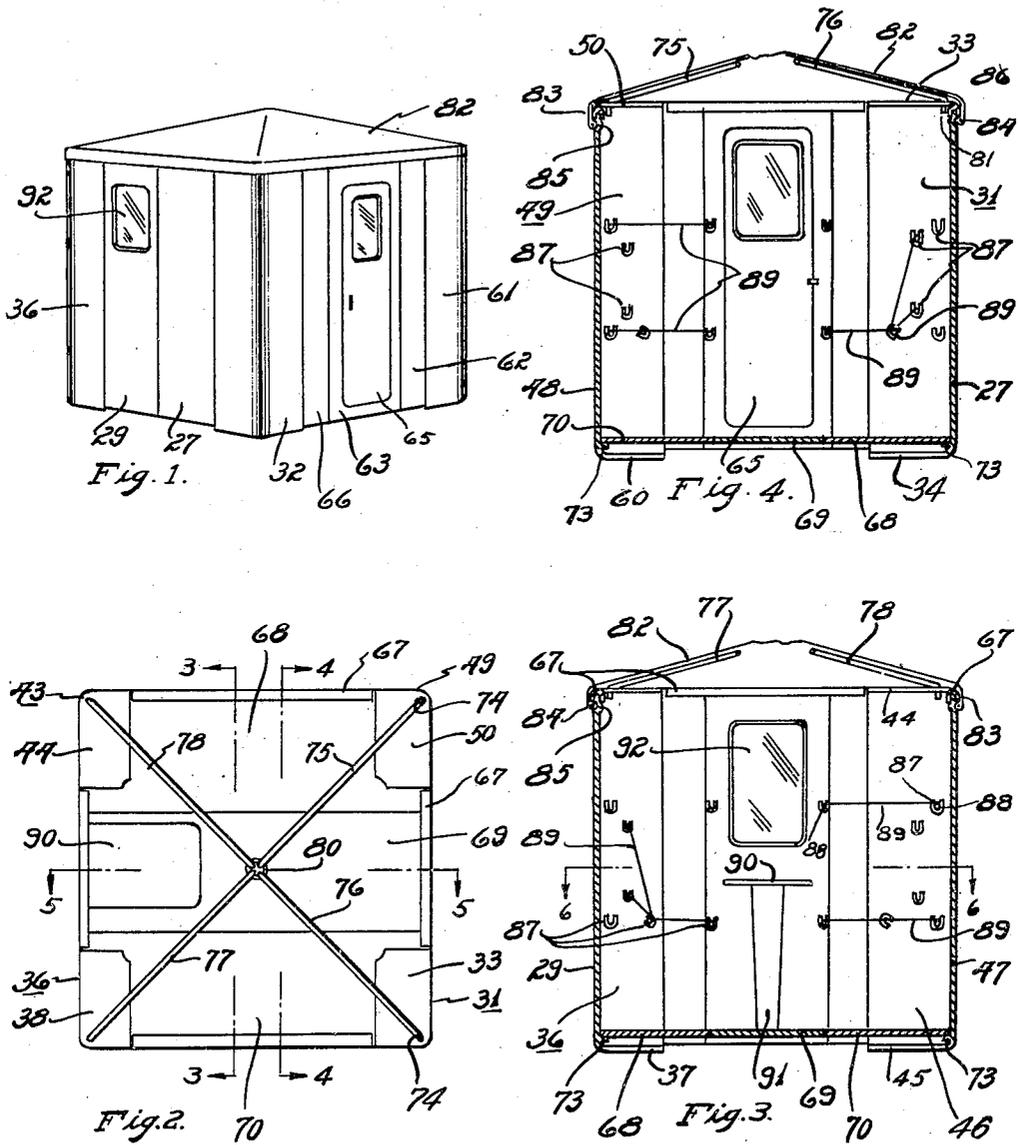
M. F. OWENS

2,485,914

COLLAPSIBLE HOUSING

Filed June 2, 1945

4 Sheets-Sheet 1



INVENTOR.
MARTIN F. OWENS
BY
Thos. Donnelly
ATTORNEY

Oct. 25, 1949.

M. F. OWENS

2,485,914

COLLAPSIBLE HOUSING

Filed June 2, 1945

4 Sheets-Sheet 2

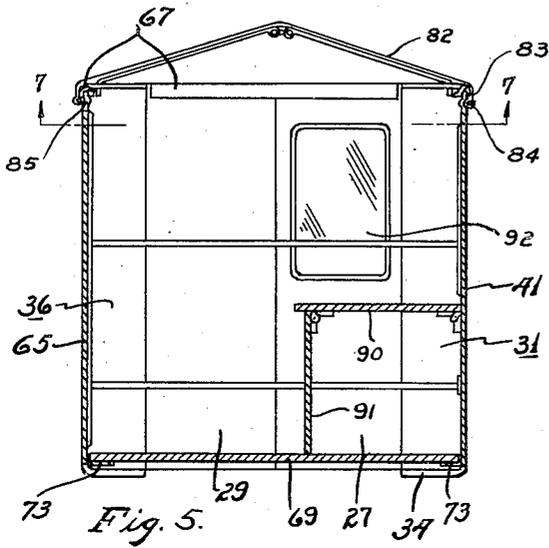


Fig. 5.

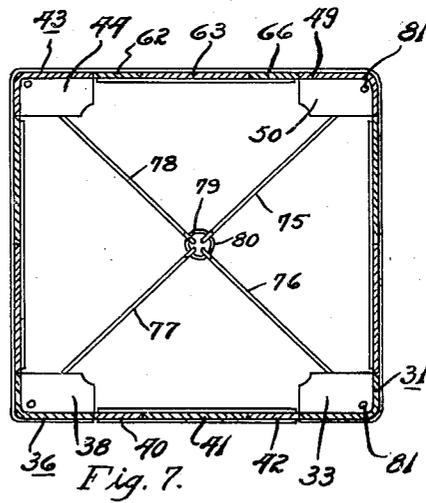


Fig. 7.

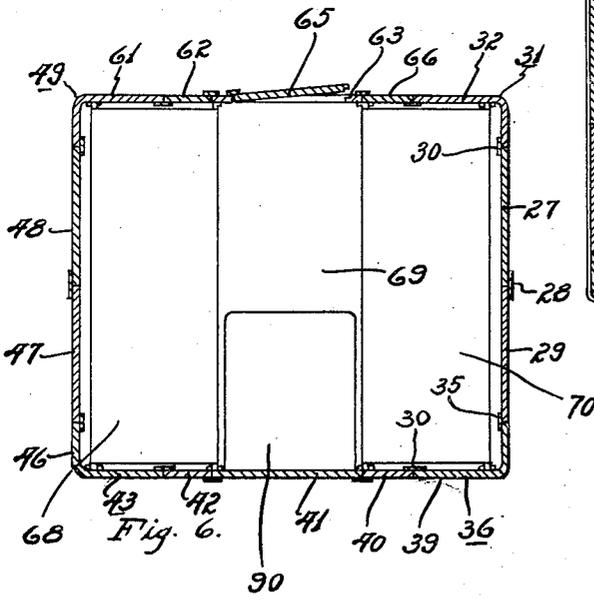


Fig. 6.

INVENTOR.
MARTIN F. OWENS
BY
Thos. J. Donnelly
ATTORNEY

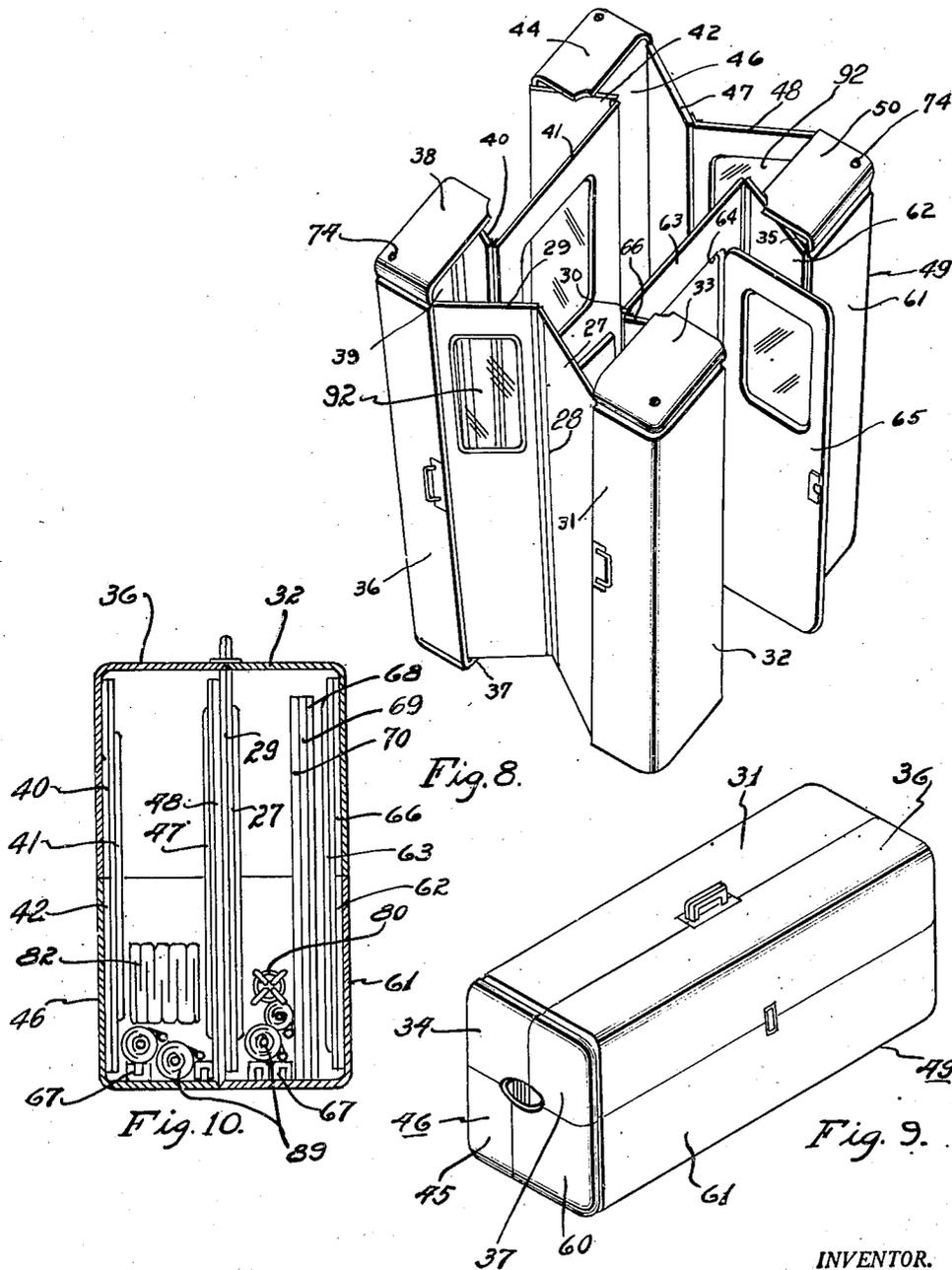
Oct. 25, 1949.

M. F. OWENS
COLLAPSIBLE HOUSING

2,485,914

Filed June 2, 1945

4 Sheets-Sheet 3



INVENTOR.
MARTIN F. OWENS
BY
M. J. Connelly
ATTORNEY

Oct. 25, 1949.

M. F. OWENS
COLLAPSIBLE HOUSING

2,485,914

Filed June 2, 1945

4 Sheets-Sheet 4

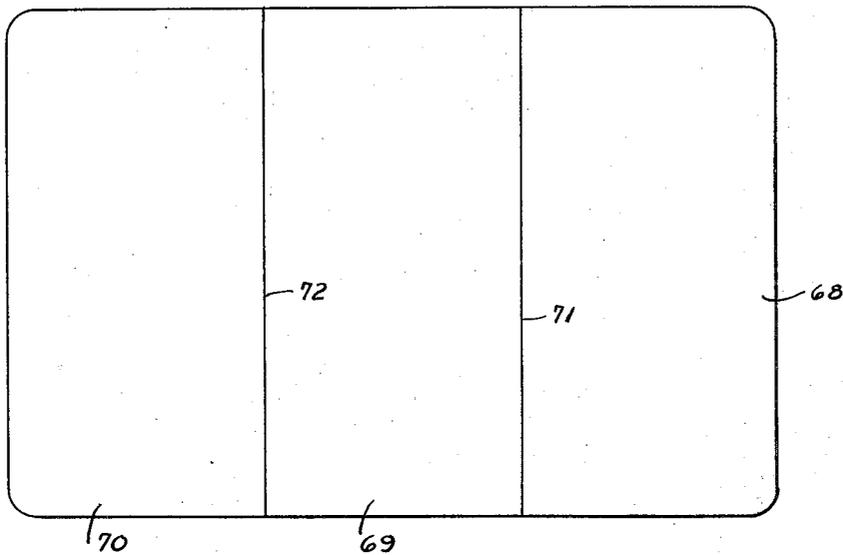


Fig. 11.

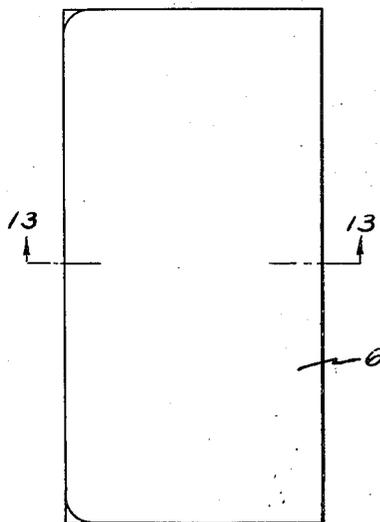


Fig. 12

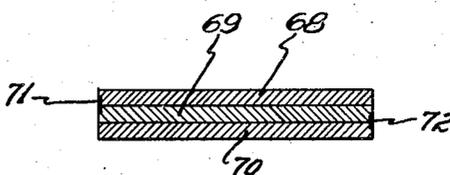


Fig. 13.

INVENTOR.
MARTIN F. OWENS
BY
Thos. Dannelly
ATTORNEY

UNITED STATES PATENT OFFICE

2,485,914

COLLAPSIBLE HOUSING

Martin F. Owens, Detroit, Mich.

Application June 2, 1945, Serial No. 597,247

4 Claims. (Cl. 20—2)

1

My invention relates to a new and useful improvement in a collapsible housing so arranged and constructed that it may be easily and quickly erected in position for use and easily and quickly folded into collapsible form to provide a compact and easily carried bundle or package.

Another object of the invention is the provision in a collapsible housing of this class of a structure for forming the four walls and comprising a plurality of hingedly connected sections which may be collapsed and folded upon each other in such a manner that the corner sections will meet to provide a box-like container in which the other sections will be enclosed.

Another object of the invention is the provision in a collapsible housing of a simple and effective means for retaining the hingedly connected sections of the wall forming portions in distended position.

Another object of the invention is the provision in a collapsible housing of this class of a simple and effective means of mounting and securing the roof in position.

Another object of the invention is the provision in a collapsible housing of this class of a foldable floor so arranged that when in distended position within the housing, the floor will serve to reinforce and prevent a collapse of the wall forming portions.

Another object of the invention is the provision in a collapsible housing of a novel means for supporting seats or berths.

Other objects will appear hereinafter.

It is recognized that various modifications and changes may be made in the detail of structure illustrated, but the disclosure herein is a practical embodiment, and it is intended that such variations and modifications may be embraced within the scope of the invention.

Forming a part of this specification are drawings in which

Fig. 1 is a perspective view of the invention.

Fig. 2 is a top plan view with a roof removed.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2.

Fig. 5 is a sectional view taken on line 5—5 of Fig. 2.

Fig. 6 is a sectional view taken on line 6—6 of Fig. 3.

Fig. 7 is a sectional view taken on line 7—7 of Fig. 5.

Fig. 8 is a perspective view of the housing in partially folded position.

2

Fig. 9 is a perspective view of the housing in full folded position.

Fig. 10 is a transversely sectional view through the folded form shown in Fig. 9.

Fig. 11 is a plan view of the floor boards used in the invention showing them in distended form.

Fig. 12 is a view of the flooring in folded form.

Fig. 13 is a sectional view taken on line 13—13 of Fig. 12.

An end wall of the housing comprises a panel 27 hingedly connected by means of a flexible strip 28 to a panel 29. This panel 27 is hingedly connected by flexible strips 30 to the panel 31 of the corner pieces. This corner piece embodies, in addition to the panel 31, a panel 32, a top wall 33, and a bottom wall 34. The panel 29 is hingedly connected by flexible strips 35 to the wall or panel 36 of the corner piece. This corner piece also embodies end walls 37 and 38 and the side wall 39.

Hingedly connected to the edge of the wall 39 is a rear wall panel 40 which is hingedly connected to the rear wall panel 41. This rear wall panel 41 is hingedly connected to the rear wall panel 42 which is hingedly connected to the wall 43 of the corner piece. This corner piece embodies the end walls 44 and 45 and the side wall 46. This side wall 46 is hingedly connected to the panel 47 which is hingedly connected to 48, this panel 48 being hingedly connected to the wall 49 of the corner piece. This corner piece embodies the end or top wall 50, the bottom wall 60 and the panel 61. The panel 62 is hingedly connected to the edge of panel 61 and this panel 62 is hingedly connected to one edge of the panel 63 in which is formed an opening 64 closed by a swingably mounted door 65. The opposite edge of panel 63 is hingedly connected to the panel 66 which is hingedly connected to the wall 32 of the corner piece. The construction is such that when these walls are in their distended form, the forms illustrated in Fig. 1 and Fig. 2 will be arrived at. In order to keep the walls in their distended form a U-shaped clip 67 is snapped over the upper edges of the panel so as to straddle the same and extend across the lines of bend. When the interior construction has been removed from the distended walls and these stiffening clips 67 have been removed the walls may be collapsed as shown in Fig. 8. The doors 65 of course would be in closed position as this inward folding movement containing the four corner pieces will meet to form a box like structure as shown in Fig. 9. This structure may be provided with any suitable locks, clips or straps to

55

3

prevent separation of the corner piece so that the device may be carried as a bundle. Experience has shown that the structure may be collapsed into the form, shape and size of a suitcase approximately 2 ft. square by 7 ft. long

In erecting the structure, the parts would be extended from the compact form shown in Fig. 9 and passed through the stage shown in Fig. 8. The panels 27 and 29 would be pushed into alignment with each other as would likewise be the panels 47 and 48. The U-shaped clip 67 would serve to extend these parts in alignment. The panel on the other walls would be moved into alignment and secured by the U-shaped clips. The flooring consists of the sections 68, 69 and 70 hingedly connected together along the lines 71 and 72. These sections may be folded upon each other in the form shown in Fig. 12 and Fig. 13 and when in this form may be contained within the structure shown in Fig. 9. When unfolded in the form shown in Fig. 11 these floor boards will rest upon the ledges 73 projecting inwardly from each of the walls of each of the corner pieces.

The top wall of each of the corner pieces is provided with a hole 74. Roof supporting braces 75, 76, 77 and 78 are each secured at one of their ends by an eyelet 79 to a ring 80. Each of these braces or roof supporting rods is provided at its end with an angularly turned portion 81 which engages in the opening 74. When each of the angularly turned ends 81 of each of the rods is engaged in its respective hole 74, a ridged structure is provided which will serve to support a flexible roof 82 stretched thereover. The marginal portion 83 of the roof is provided with a draw-string 84 adapted to set in the recess or groove 85 so that when the draw-string is drawn tight the roof covering 82 will be securely fastened in place.

Mounted on the inner face of oppositely disposed panels are U-shaped clips 87 in which may engage rods 88 connected together by flexible material 89, such as canvas or the like which will serve as berths. Hingedly connected to the rear wall of the structure is a table 90 having a hingedly connected supporting leg 91. A window 92 may be mounted in any of the panels desired.

What I claim as new is:

1. A collapsible house of the class described, comprising: a structure having oppositely disposed side walls and a front and a rear wall, each of said walls comprising a plurality of hingedly connected sections; a plurality of corner pieces, the section of said walls adjacent to a corner piece being hingedly connected to said corner piece, said sections being foldable inwardly, each of said corner pieces embodying a top and a bottom and a pair of walls connecting to the top and bottom and meeting at the corner.

2. A collapsible house of the class described, comprising: a structure having oppositely disposed side walls and a front and a rear wall, each of said walls comprising a plurality of hingedly connected sections; a plurality of corner pieces, the section of said walls adjacent to a corner piece being hingedly connected to said corner piece, said sections being foldable inwardly, each

4

of said corner pieces embodying a top and a bottom and a pair of walls connecting to the top and bottom and meeting at the corner; said wall sections being of such size that, when folded inwardly the maximum distance, opposed edges of said corner pieces engage to form an enclosing box-like structure.

3. A collapsible house of the class described, comprising: a structure having oppositely disposed side walls and a front and a rear wall, each of said walls comprising a plurality of hingedly connected sections; a plurality of corner pieces, the section of said walls adjacent to a corner piece being hingedly connected to said corner piece, said sections being foldable inwardly, each of said corner pieces embodying a top and a bottom and a pair of walls connecting to the top and bottom and meeting at the corner, said wall sections being of such size that, when folded inwardly the maximum distance, opposed edges of said corner pieces engage to form an enclosing box-like structure; and rigid means engaging said walls and overlying the point of swingable connections of sections thereof for preventing swinging of said sections and maintaining the same in alignment.

4. A collapsible house of the class described, comprising: a structure having oppositely disposed side walls and a front and a rear wall, each of said walls comprising a plurality of hingedly connected sections; a plurality of corner pieces, the section of said walls adjacent to a corner piece being hingedly connected to said corner piece, said sections being foldable inwardly, each of said corner pieces embodying a top and a bottom and a pair of walls connecting to the top and bottom and meeting at the corner, said wall sections being of such size that, when folded inwardly the maximum distance, opposed edges of said corner pieces engage to form an enclosing box-like structure; and rigid means engaging said walls and overlying the point of swingable connections of sections thereof for preventing swinging of said sections and maintaining the same in alignment; supporting ledges projecting inwardly from said corner pieces; and floor forming members resting upon said ledges and preventing inward swinging of said sections.

MARTIN F. OWENS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,377,382	Wyman	May 10, 1921
2,015,321	Shelton	Sept. 24, 1935

FOREIGN PATENTS

Number	Country	Date
655	Great Britain	1854
52,841	Switzerland	1911
54,295	Norway	1938
128,501	Great Britain	June 26, 1919
500,189	France	1919