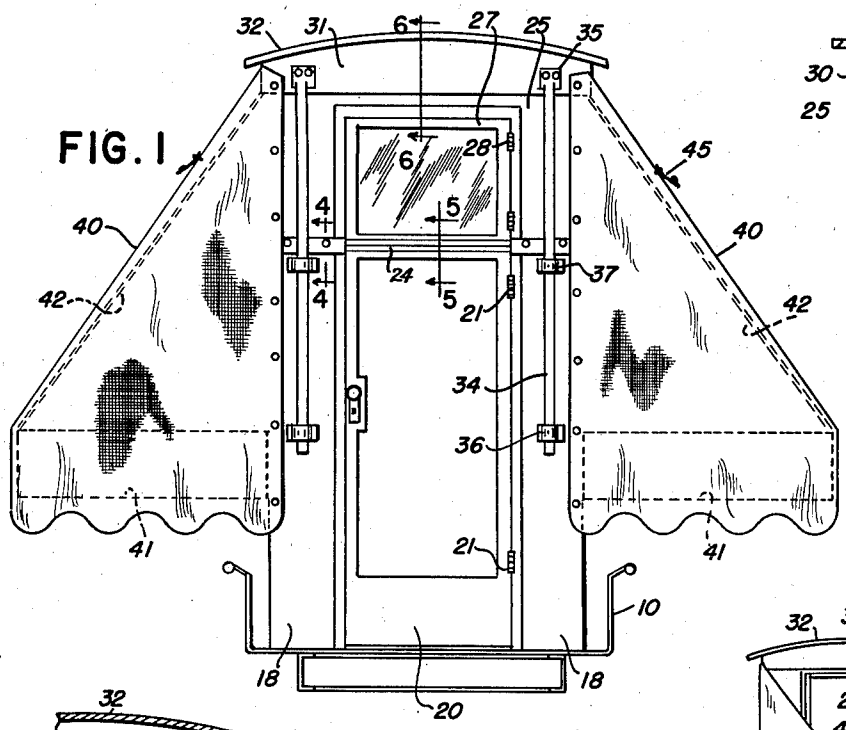
Aug. 8, 1944. A. L. STROPE 2,355,340

KNOCKED-DOWN HOUSING STRUCTURE

Filed March 19, 1943

FIG. 1



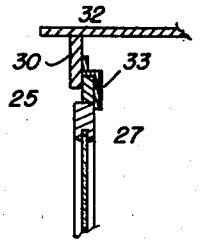


FIG. 6

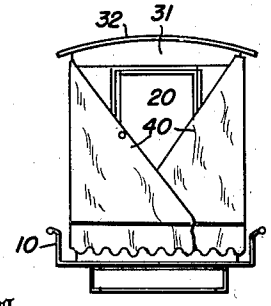


FIG. 2

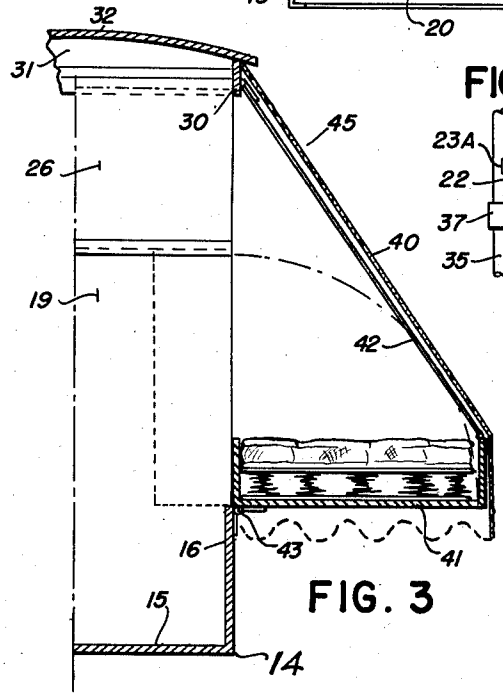


FIG. 3

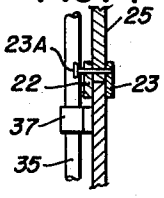


FIG. 4

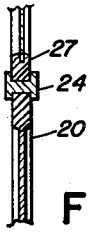


FIG. 5

ALVA L. STROPE
INVENTOR

BY Herbert E. Smith
ATTORNEY

Patented Aug. 8, 1944

2,355,340

UNITED STATES PATENT OFFICE

2,355,340

KNOCKED-DOWN HOUSING STRUCTURE

Alva L. Strope, Wallace, Idaho, assignor of one-half to Daniel Hannah, Wallace, Idaho

Application March 19, 1943, Serial No. 479,808

1 Claim. (Cl. 20—2)

My invention relates to a knocked-down housing structure and more particularly applies to structures which are suitably adapted for transportation in the box or bed of a light truck of the type commonly identified as a "pick-up."

An important object of this invention is the provision of a housing structure which may be knocked down and in its knocked down condition is very compact, but which may easily be extended or assembled into a roomy and serviceable housing unit, all without unduly complicated parts or elaborate assembly steps and in a manner that lesser mechanically skilled persons may readily use the structure.

Another object of the invention is the provision, in a knocked down housing structure, of a novel and useful bulkhead arrangement which will counter the forces of the elements without being heavy or difficult to assemble and which will also support a suitable roof and an enclosing means for the structure.

A further object of the invention is the provision, in a knocked down housing structure, of movable bunks which may be contained in the compacted structure and form an important part thereof while at the same time they may be easily moved for use in the assembled or erected structure without complicating the assembly operation.

The foregoing objects, and others ancillary thereto I prefer to accomplish as follows:

According to a preferred embodiment of my invention, I provide a base box member which has end wall panels forming a portion of the end bulkheads of the erected structure. This box member encloses the various parts of the knocked down house unit when it is compacted. Supplementary bulkhead sections are erected on the main end bulkhead sections to enlarge the end area of the structure. A cover or roof unit is also provided for mounting upon the end sections of the base box in the compact condition of the device, and which may be supported over the enclosed area by means of the end bulkheads in the erect position. At one or both sides of the base box a bunk unit is employed which stands on its edge and forms a wall partition when the housing unit is compacted, but which may be swung outside the bounds of the base box when the unit is to be used for living and sleeping purposes. Suitable canvas or material covering means are cooperatively attached to the roof section to seal the unit when compacted and to enclose side partitions of the unit when extended for living purposes.

The novel features that I consider characteristic of my invention are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and its method of operation, together with additional objects and advantages thereof, will best be understood from the following description of a specific embodiment when read in connection with the accompanying drawing, in which

Figure 1 is an end view of the housing structure in its erected position;

Figure 2 is an end view of the housing structure in its compacted association of parts;

Figure 3 is a half cross-sectional view through the erected housing structure, taken in a vertical plane;

Figure 4 is a fragmentary cross-sectional view, taken on line 4—4 of Figure 1;

Figure 5 is a fragmentary cross-sectional view taken on line 5—5 of Figure 1;

Figure 6 is a fragmentary cross-sectional view taken on line 6—6 of Figure 1.

A knocked down housing structure, to overcome the defects of the prior art, must have at least two totally distinct characteristics; it must be compact when disassembled for ease of transportation and handling; and it must also be simple to erect and assemble for use.

I have shown the invention as though it were supported in the bed of a relatively small transport vehicle, such as a truck, of the one-half or three-quarter ton size. With that thought relative to transportation in view, it will be seen that the reference numeral 10 designates the truck box of the vehicle, and in this instance the truck box is shown as having the usual floor or bed and side walls. Upon this bed or within this said box is mounted the base box 14 of my knocked down housing unit, which base box comprises the bottom 15 and side walls 16 rising thereabove longitudinally of the structure. End bulkheads 18 and 19 are also shown. End bulkhead 18 is provided with a door section 20 hinged at 21. On the upper edge each of the sections 18 and 19 are provided with upstanding batten strips 22, 23, whereby a groove is formed for the reception of supplemental bulkhead panels 25 and 26. The supplemental panel 25 has a partial door section 27 hinged at 28 and adapted to swing with the lower door section 20 on occasion, or to swing independently thereof, if that be desired. In Figure 5 the two door sections are shown as joined by strip 24.

The roof unit comprises the side walls 30, end walls 31, joined together to form a right rectan-

gle and covered by the roof panel 32, here shown to be curved for the purpose of drainage and the like. The roof or crown unit is supported by the end bulkheads, as disclosed in Figure 1, upon the end wall units through the engagement of the offset flange 33 over the upper edge of the bulkheads. The assembled structure is aligned and joined by means of the dowels 34. Dowels 34 depend from the roof where each is attached by a flange 35. The leg of a dowel may slide in the loops 36, 37. It will be understood that a plurality of these dowels are employed as required, to effect a rigid bracing and supporting of the various demountable elements.

A bunk box 41 is hinged at 43 to the upper edge of the relatively low side panel 16. Such a bunk may contain springs and mattress or other suitable equipment for the purpose of sleeping. In the extended position the bunk boxes 41, shown in Figure 1, extend at right angles from the housing unit and are maintained in that position by the web straps 42 that depend from the roof. It will be seen that on occasion the bunk boxes 41 may be swung on edge so that they are disposed in an erect position with the bottom panel in line with the side walls of the base box of the housing structure, in which position the bottom walls 43 of the bunk form side walls of the compacted structure.

When the bunks are swung to their usable position, as in Figure 1, they are enclosed by awning, netting or canvas covers 40 which depend from the roof and may be suitably secured around the lower edges in the conventional manner.

To demount the structure, the canvas covers are loosened and the roof unit 30 is raised to permit the removal of the supplemental bulkhead sections 25 from within the goove on the top edge of the primary wall panels and from the offset flange 33. Such removal parts may be stored within the unit when it is compacted. The bunk units are swung on edge as in Figure 3 and the cover is lowered so that the end and side walls 31 and 30 enclose the upper edge of the bulkhead units 19 and 20 and the upper edges of the on-edge bunks, respectively. The canvas covers are then drawn tight along the sides of the unit and may be tied together across the ends. Along the sides where it is generally necessary to shorten the canvas, a flap 45 may be secured to the roof along the edge, thus leaving an enclosed fold of material.

In Figure 5, fastening pins 46 are shown as being passed through the batten strips 22 and 23 into the lower edge of the supplemental wall panel 25 to lock it in position.

In Figure 7 the joint between the upper door panel 27 and the end wall 31 of the roof unit is shown in enlarged detail, and a header jamb for the door is provided by member 33 which serves as a stop to limit inward swinging of the door.

It will be understood that the panel units of my housing structure are preferably formed of plywood or other light and strong sheet material, so that overall the unit is extremely light so that one person can load or unload it from a truck if that be necessary. Yet the unit is strong enough to accommodate and serve at least two or three persons. Suitable cupboards and lockers may be provided, but for the convenience of the present illustration such details have been omitted.

Lock pins 23A are shown in Figure 4 to pass through the battens 22, 23 and holes in lower edge of the supplementary end wall panels 25, 26.

Although I have shown and described certain specific embodiments of my invention, I am fully aware that many modifications thereof are possible. My invention, therefore, is not to be restricted except insofar as is necessitated by the prior art and by the spirit of the appended claim.

Having thus described my invention, I claim:

A housing structure, comprising a base box having end wall sections, side wall sections of less height than said end wall sections, one of said end wall sections having a door therein, a rectangular roof unit supported upon said end wall sections and adapted to be raised thereabove, means for slidably securing said roof section to said end wall sections and for guiding the same during the raising operation, supplemental end wall sections to be disposed between said roof sections and the upper edge of said wall sections, a bunk pivoted to the upper edge of each side wall to swing outwardly from the area defined by the base box unit for right angular disposition in a horizontal plane, means between said roof section and the outer edge of said bunk section whereby said bunks are supported at their outer edges from said roof, and fabric means for enclosing said bunk when in the extended position.

ALVA L. STROPE.