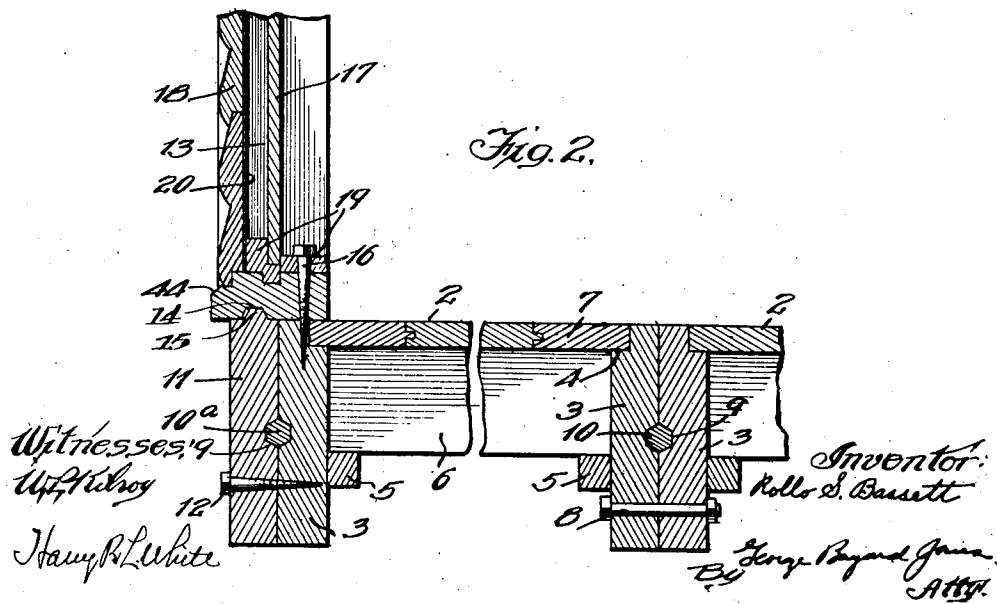
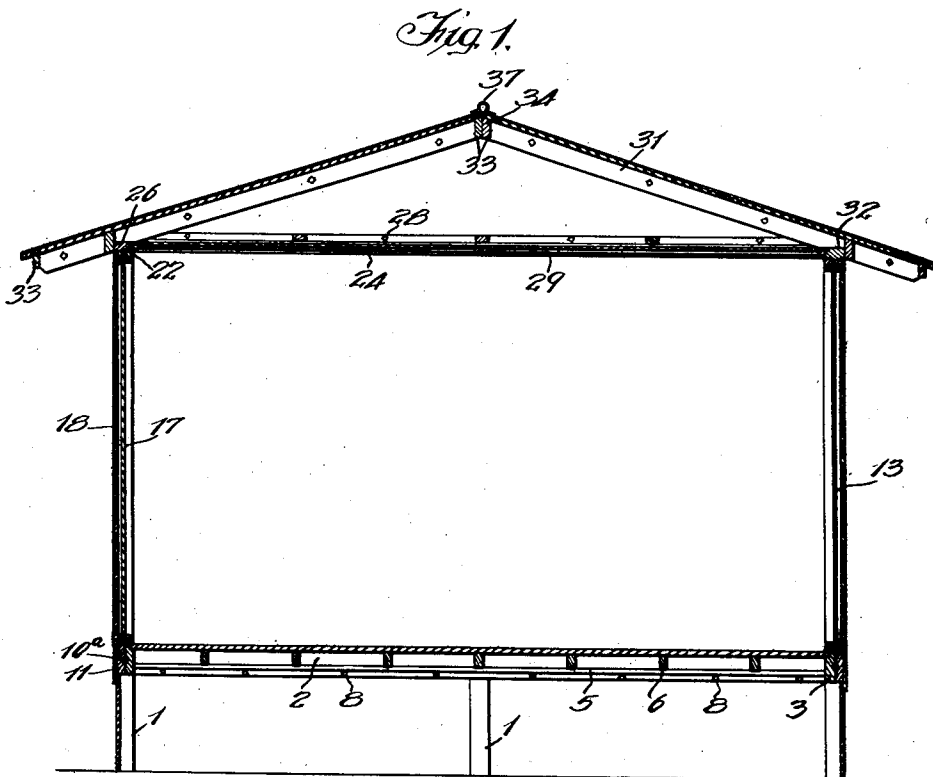


R. S. BASSETT.
PORTABLE BUILDING.
APPLICATION FILED FEB. 25, 1918.

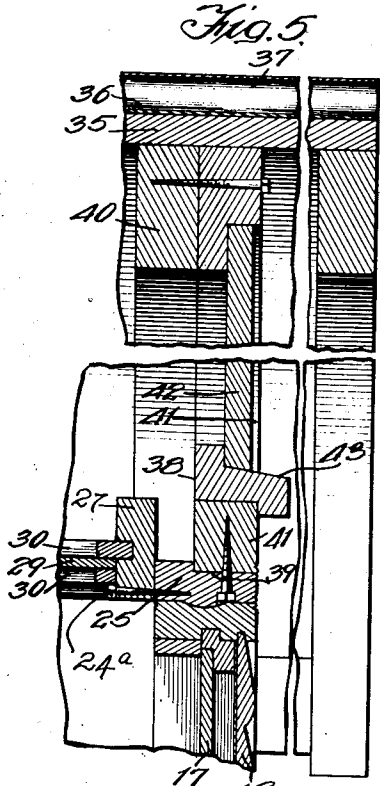
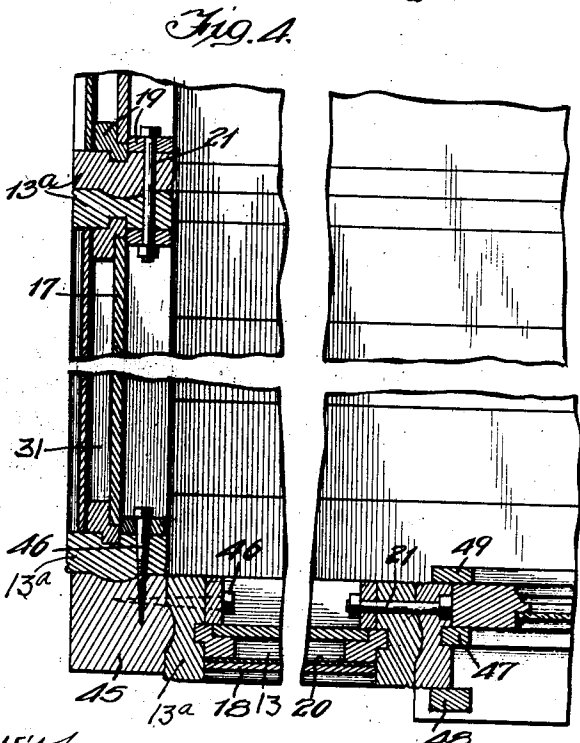
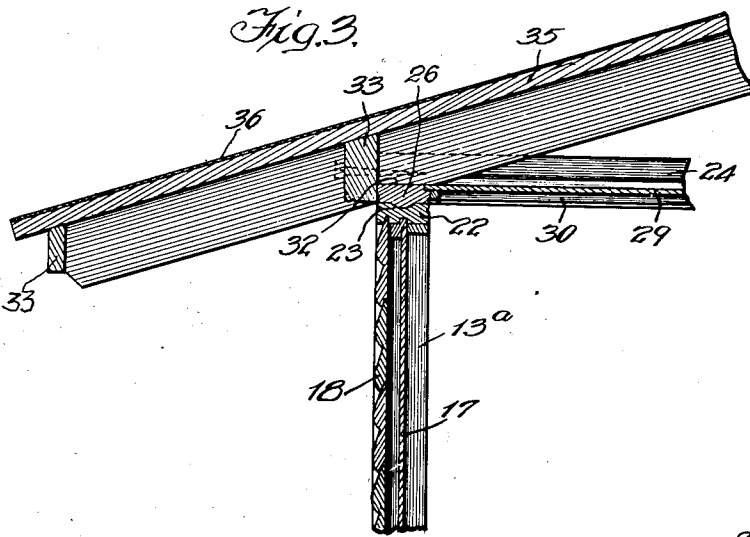
1,337,745.

Patented Apr. 20, 1920.
3 SHEETS—SHEET 1.



1,337,745.

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 3 SHEETS—SHEET 2.



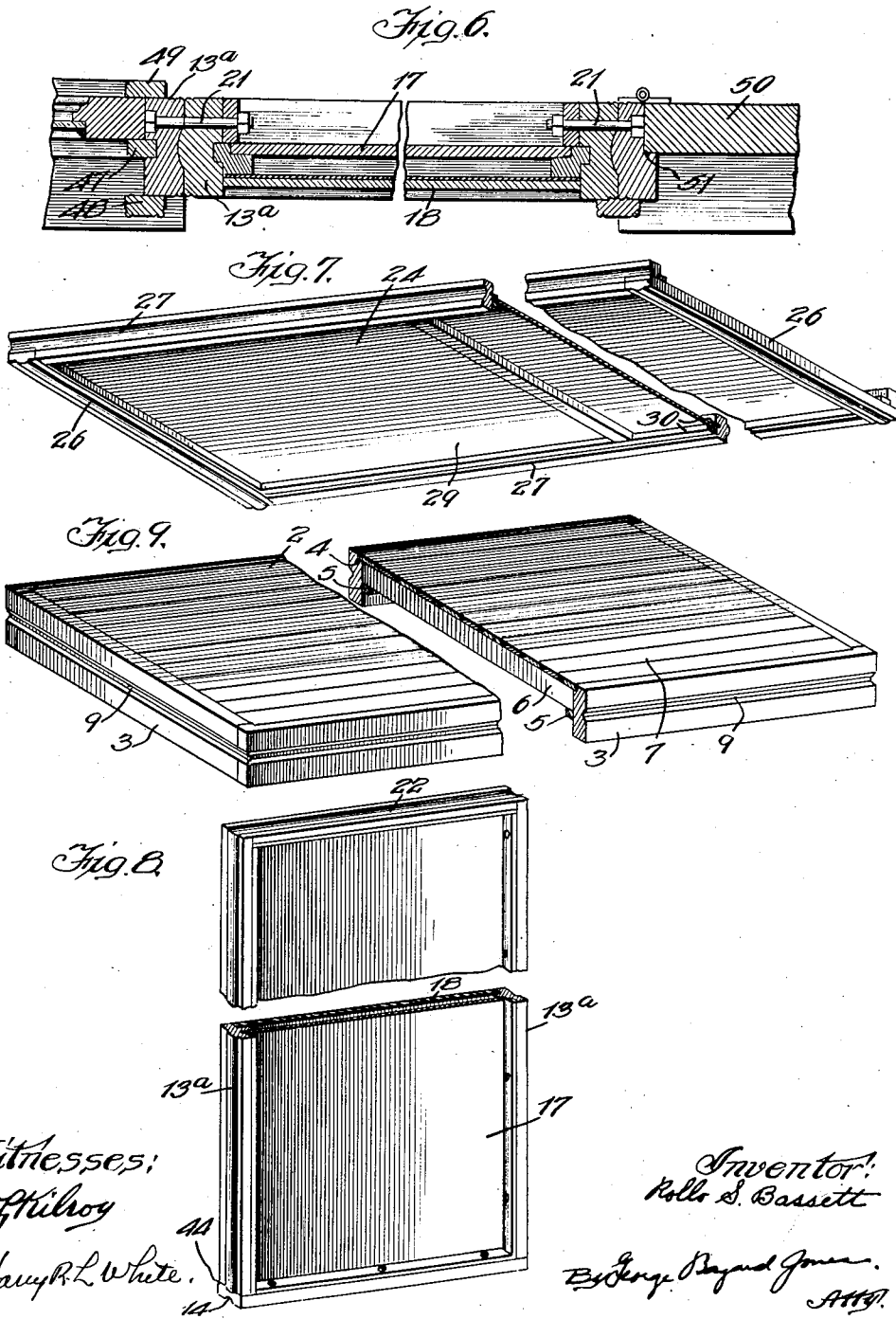
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PORTABLE BUILDING.

1,337,745.

Specification of Letters Patent. Patented Apr. 20, 1920.

Application filed February 25, 1918. Serial No. 218,960.

To all whom it may concern:

Be it known that I, ROLLO S. BASSETT, citizen of the United States, residing at Champaign, in the county of Champaign and State of Illinois, have invented a certain new and useful Improvement in Portable Buildings, of which the following is a full, clear, concise, and exact description.

This invention relates to improvements in building construction and more particularly to the construction of portable or knock-down buildings.

In portable buildings as heretofore constructed, plastering of the walls and ceilings, if desired, had to be done by persons engaged in that class of work after the building was erected which made the finished building much more expensive. Furthermore, the plaster thus applied was completely destroyed whenever the building was taken down or disassembled and hence a replastering of the walls and ceilings thereof became necessary each time the building was reerected.

One object of the present invention is to provide a portable building comprising interchangeable units or sections, the wall and ceiling sections of which are provided, before assembly, with plaster in such a manner that the same is not injured or destroyed in assembling or disassembling the building, the same remaining intact at all times whereby an interiorly plastered portable building is provided.

Another object of the invention resides in the provision of a portable building comprising substantially only four groups of sections, namely, floor, wall, ceiling and roof sections, the sections of each group being of uniform construction and interchangeable whereby buildings of different sizes, design or arrangement may be constructed and whereby the same may be quickly and easily assembled or disassembled by persons other than skilled builders.

A further object is the provision of a building of the class described which shall be provided with interlocking joints throughout whereby air leakage is reduced to a minimum and whereby an extremely rigid structure is provided.

Another object is to provide a portable building which shall be more rigid, more weather proof and more heat and cold resisting than the ordinary permanently constructed frame house.

Other objects and advantages will be apparent from the following description taken in connection with the accompanying drawings wherein the preferred embodiment of the invention is illustrated.

Figure 1 is a transverse vertical sectional view taken through a portable building constructed in accordance with the present invention.

Fig. 2 is a vertical sectional view of a lower corner of the building.

Fig. 3 is a vertical sectional view of an upper corner thereof.

Fig. 4 is a top plan section of one corner.

Fig. 5 is a vertical sectional view of one corner showing the wall, ceiling and roof construction.

Fig. 6 is a top plan section of one of the side walls.

Fig. 7 is a perspective view of one of the ceiling sections.

Fig. 8 is a perspective view of one of the wall sections, and

Fig. 9 is a perspective view of one of the floor sections.

Referring more in detail to the drawings, it is preferred to support the building above the ground upon suitable posts 1. There are preferably three rows of these posts, one running centrally of the building and the other two disposed along the outer boundaries thereof substantially as shown in Fig. 1 of the drawings. After the posts have been positioned and driven into place, suitable floor sections 2 are mounted thereon, the number of said sections employed being dependent upon the length of the building being constructed. One of these floor sections is shown in detail in Fig. 9 and comprises a plurality of joists 3 fastened together at their ends to form substantially a box, the upper edge of which is cut out to provide a suitable shoulder such as illustrated at 4. Secured around the inner surface of this box-shaped floor section at a point somewhat below the shoulder 4 are a plurality of strips 5 which provide a ledge adapted to support cross members 6, the upper edges of which preferably lie flush with the shoulder 4 as shown more clearly in Fig. 2. The flooring 7 fits down into the shoulder 4 and is securely fastened therein and also to the cross members 6. It will be noted that the flooring, when in position, lies flush with the upper edge of the joists 3. These floor sections,

as above stated, are positioned on the posts 1 and are held securely together by means of suitable bolts 8 which pass through the abutting joists of adjacent sections, substantially as shown. As a further means of holding the floor sections together and also as a means of preventing relative movement therebetween, the abutting joists of each section are provided with grooves 9 forming a hexagonal channel when the sections are placed together, through which channel a suitable tenon strip 10 is passed and securely fastened.

After the proper number of floor sections have been mounted in position on the posts 1, suitable base boards 11 are secured thereto and are adapted to entirely surround the floor made up, as above described, of the sections. These baseboards 11 may be held in place by lag screws 12 or other suitable fastening means. It is also desired to provide a tenon strip 10^a between the abutting faces of the baseboards 11 and the joists 3 so as to give the desired rigidity to the structure. The floor sections 2 are bolted together, as above described, from beneath after the sections have been properly positioned. After the floor has been assembled and the surrounding baseboards 11 secured in position, the wall sections or units 13 are mounted in upright position around the outer edges of the floor.

Each of the wall sections 13 is also in the form of a frame, as shown more clearly in Fig. 8, the base of said frame being provided with a groove 14 which is adapted to fit down over the projection 15 provided along the upper edge of the baseboards 11. This provides means whereby the wall sections are held in proper position and in proper alignment, said sections being securely attached to the floor by means of lag screws 16 which pass through the base of each of the sections and into the adjacent joist of the floor sections.

As above stated, each wall section is in the form of a frame within which is securely fastened a reinforced plaster panel 17 which serves as the inner wall of the building, and a drop siding 18 which provides the outer wall of said building. The inner wall of plaster 17 is clamped in place between suitable retaining strips 19, one of which is mortised into the frame of the section as shown. The inner face of the drop siding 18 is preferably covered with heavy paper 20 or some other suitable insulating material. It will be noted that the plaster wall 17 and the drop siding 18 are secured in spaced relation, that is, an air space is provided between the two in order to minimize heat conductivity.

The width of the wall sections is preferably uniform and the same as that of the floor sections and the roof and ceiling sec-

tions hereinafter described. The side members of the frame of each wall section are preferably in the form of male and female members 13^a, as shown, whereby said sections may be interlocked when the same are mounted in position. The wall sections are held securely together by suitable bolts such as illustrated at 21 which pass through the side members of the frames substantially as shown.

The top members of the frames or wall sections 13 are in the form of female members 22 so that after the wall sections have been positioned around the floor of the building and bolted securely together as above described a groove 23 is provided around the top edge of the walls as shown more in detail in Fig. 3. This provides a seat for the ceiling sections 24, one of which sections is shown in detail in Fig. 7. The transverse end members 26 of each of the ceiling sections 24 are in the form of male members which are adapted to fit down into the grooves 23 of the corresponding wall sections 13. The side members of each of the ceiling sections 24 are also in the form of male and female members 27 which form means whereby the ceiling sections also interlock with one another when in position in substantially the same manner as described in connection with the wall sections 13. Suitable bolts 28 are provided to hold the ceiling sections securely in position. Each of the ceiling sections is also provided with a reinforced plaster panel 29 which panel is held in place by suitable retaining strips 30. The roof of the building 31 is also preferably made in sections, each section being adapted to extend from the center of the building out over the sides thereof substantially as shown in Figs. 1 and 3. The roof sections comprise rafters secured together in substantially box-shape, said rafters being cut out as at 32 to fit the top edge of the walls.

Suitable cross pieces 33 are provided to make each of the sections sufficiently rigid, the cross pieces 33 at one end of each of the roof sections being adapted to abut as shown at 34 when said sections are in position to thereby provide in effect a ridge. These roof sections are also bolted together in some suitable manner. Each of the roof sections is provided with suitable roofing timber 35 when originally made, so that all that is necessary after the sections have been bolted together, as shown in Fig. 1 and placed in position on the walls of the building, is to apply the outer coating of composition roofing 36 and the metal cap 37.

The building is now complete all except the triangular shaped gables 38 which are applied to the front and back of the building between the upper edges of the front and back wall sections and the roof. These

gables 38 are preferably mounted in suitable cut out portions 39 provided in the male members 25 mounted on the top of the front and back wall sections and are fastened to said members 25 and also to the adjoining rafter 40 by means of suitable lag screws. The end sections of the ceiling are secured to these male members 25, as shown in Fig. 5 of the drawing, by means of lag screws 24^a which pass through the side members 27 of said sections and into said members 25. Should the side member 27 of the section thus secured to the member 25 be a male member, it will be found advantageous in making the connection to plane off or otherwise remove the bead or projection thereof, for otherwise such bead would prevent the making of a good joint at this point and would to a degree impair the rigidity of the structure. In Fig. 5 the bead of the member 27 is shown removed for this purpose. When a female member 27 is encountered, obviously no change or alteration in its construction need be made. The gables comprise an outer frame work 41 having secured thereto suitable upright members 42 at the base of which is provided a water table 43. The base members of the wall sections 13 are also beveled as at 44 in order to divert the water which may run down the side of the building. The building is also provided, when completed, with suitable corner posts 45, as shown in Fig. 4, said corner posts being also of male and female design whereby they may interlock with the adjacent side members of the wall sections. The adjacent wall sections and the corner posts are secured firmly in position by means of lag screws 46.

In Figs. 4 and 6 wall sections are illustrated which are especially constructed to receive doors and windows. It will be noted from these figures that the side members of these sections are of the same general design as those heretofore described, said side members being only slightly altered in order to transform them into either door or window jambs as the case may be. If it is desired to provide a window in one of the wall sections, each of the side members of the frame is provided with the usual parting stop 47, the outside casing strip 48 and the sash stop 49, the portion of the wall section above and below the window being of the same construction as hereinbefore described. On the other hand, if it should be desired to provide one of the wall sections with a door, as shown at 50 it merely becomes necessary to cut out the side member of the frame slightly, as illustrated at 51 so as to provide a door jamb of the ordinary type. For obvious reasons the heads of the connecting bolts 21 which extend through a side member which provides either a door or window jamb must be countersunk as shown. It will

be noted, however, that these alterations do not in any way affect or modify the general scheme of construction and that in view of the fact that each of the wall sections is of uniform construction and interchangeable regardless of whether or not it is provided with a wall, a window or a door, windows and doors may be changed from one location in a wall to another without requiring any additional construction. The frame of the wall section when used for a door is also provided with an outer strip similar to the strip 48 provided in the event a section is used for a window. This strip when the section is used for a door provides means for the mounting of a screen door on the outside of the building and when used as the outside casing of a window the strip may be used for the purpose of supporting either a sliding, swinging or permanently attached screen.

It is preferred to completely finish all of the sections of the entire building, in the factory, and to ship the same to the place where it is desired to erect said building. In other words, each section is permanently constructed, painted and all of the hardware attached in the factory, so that a mere assembly is all that is required when it is desired to erect the building.

It will therefore be noted that a portable building is provided which is made up of substantially only four groups of sections, namely floor, wall, ceiling and roof sections, the sections in each of said groups being of uniform and interchangeable design, and that all that is necessary in erecting the building is to properly position the various sections, as above described, and bolt them together.

It will also be noted that all of the joints throughout the building are interlocking joints and that this in addition to the air space provided between the inner and outer walls and the insulation on the inner side of the drop siding serves to reduce air leakage to a minimum. Hence an extremely rigid and weather proof structure is provided which may be heated more quickly and readily than the ordinary permanently constructed frame building.

While the building has been herein described as mounted on suitable posts, it is of course, obvious that a stone, brick, concrete or other suitable foundation may be provided for the same, if desired.

Furthermore, the construction herein described has been illustrated in the accompanying drawings as embodying wall and ceiling sections provided with plaster, such as would be desirable in homes, schools, hospitals, and the like. However, it is obvious that the same general scheme of construction may be carried out in the erection of warehouses, barracks, sheds, garages, poul-

try houses, stables, etc., where no plaster need be used. In other words, buildings of various kinds may be erected with or without plaster walls and ceilings, as required, without materially altering the general construction.

It is also obvious that various changes and modifications may be made in the construction and arrangement of parts herein illustrated and described and, therefore, it is not desired to limit the invention to the particular embodiment shown except where limitations appear in the appended claims.

I claim:

1. A portable building, comprising substantially rectangular-shaped floor sections arranged side by side, baseboards surrounding said floor sections and interlocked therewith, a plurality of wall sections mounted on said baseboards and extending partly over said floor sections, and ceiling sections mounted across the upper ends of said wall sections.

2. An improved floor for portable buildings, comprising a plurality of interlocking box-shaped sections bolted together, each of said sections being provided with a shoulder surrounding its upper edge, a supporting ledge on the inner face of each section below said shoulder, a plurality of transverse members supported on said ledge, the upper edges of said members lying flush with said shoulder, flooring secured to said members and to said box-shaped section, said flooring lying flush with the upper edge of the latter, and a band surrounding said sections and interlocked therewith.

3. A portable building, comprising a floor and side and end walls, grooves extending along the upper edges of said side walls, and a plurality of interlocking ceiling sections, each provided with depending projections and each extending from one of said side walls to the other and resting thereon with said projections fitting in said grooves, whereby said walls and ceiling are interlocked against accidental displacement and whereby rigidity is imparted to the building.

4. An improved floor for portable buildings, comprising a plurality of box-shaped sections bolted together, flooring secured to each of said sections, splines interposed between each of said sections, baseboards banding said sections together, and splined thereto and means provided around the upper edges of said baseboards for interlocking engagement with the walls of the building.

5. A floor for portable buildings comprising a plurality of substantially rectangular box-shaped sections, and baseboards surrounding said sections and adapted to securely band them together, said baseboards being co-extensive with said floor and interlocked with said sections.

6. A portable building comprising groups of floor, wall, and ceiling sections, the sections in each of said groups being interlocked, and each section of the floor and ceiling groups being adapted to engage the wall sections and to extend from one side wall to the other and having an interlocking engagement with each of said walls.

7. A portable building comprising substantially rectangular shaped floor sections, baseboards surrounding said sections and interlocked therewith, a plurality of wall sections mounted on said baseboards and extending partly over said floor sections in one direction and beyond said baseboards in the other direction, and ceiling sections mounted across the upper ends of said wall sections, all of said sections being of substantially the same width and adapted to aline one with the other when secured in position.

8. In a portable building, a plurality of interlocking wall sections provided with alining grooves along their top and bottom edges, box shaped floor sections extending transversely of the building, from one side wall to the other; and partly underlying said wall sections, baseboards banding said floor sections together and interlocked therewith, and provided with upstanding projections adapted for engagement with the lower grooves in said wall sections, and ceiling sections also extending transversely of said building from one side wall to the other and provided with means for engagement with the upper grooves of said wall sections.

9. In a portable building, a plurality of interlocking wall sections provided with alining grooves along their top and bottom edges, box shaped floor sections extending transversely of the building, from one side wall to the other, and partly underlying said wall sections, baseboards banding said floor sections together and interlocked therewith, and provided with upstanding projections adapted for engagement with the lower grooves in said wall sections, and ceiling sections also extending transversely of said building from one side wall to the other and provided with means for engagement within the upper grooves of said wall sections, all of said sections being of substantially the same width and adapted to aline one with the other when secured in position.

10. In a portable building, a plurality of interlocking wall sections provided with alining grooves along their top and bottom edges, box shaped floor sections extending transversely of the building, from one side wall to the other, and partly underlying said wall sections, baseboards banding said floor sections together and interlocked therewith, and provided with upstanding projections adapted for engagement with the lower grooves in said wall sections, and ceiling

sections also extending transversely of said building from one side wall to the other and provided with means for engagement with the upper grooves of said wall sections, the
5 bottom grooved member of each wall section extending beyond said baseboards to thereby divert water which may run down the sides

of the building away from the bottom thereof.

In witness whereof, I hereunto subscribe 10
my name this 15th day of February A. D. 1918.

ROLLO S. BASSETT.