W. E. CHARRON & L. N. RICHARD.

DOOR FRAME.

APPLICATION FILED APR. 8, 1912.

1,067,306. Patented July 15, 1913.

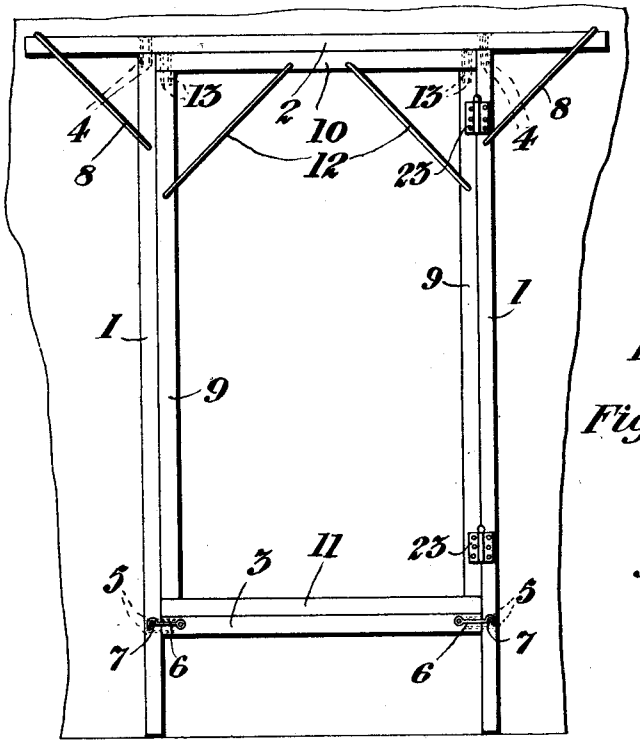


Fig. 1.

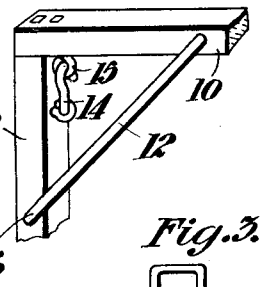


Fig. 2.

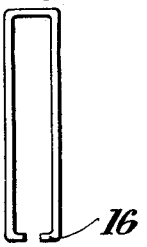


Fig. 3.

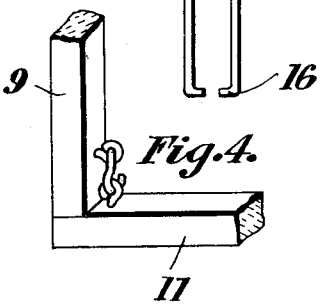


Fig. 4.

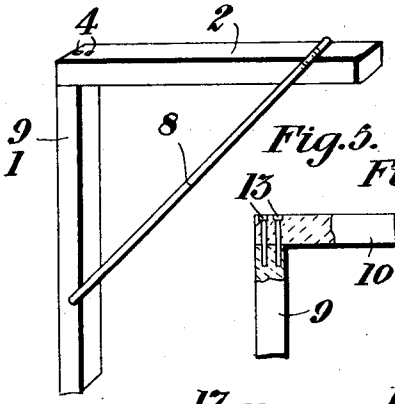


Fig. 5.

Fig. 6.

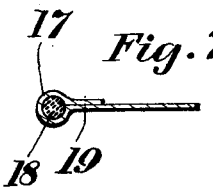


Fig. 7.

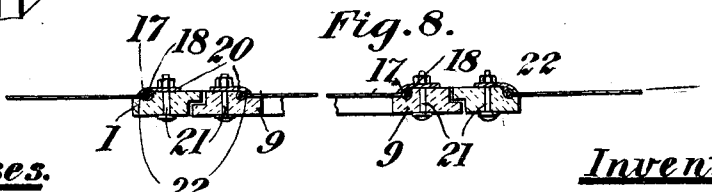


Fig. 8.

Witnesses.

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UNITED STATES PATENT OFFICE.

WALTER EMILE CHARRON AND LOUIS NAPOLÉON RICHARD, OF OTTAWA, ONTARIO, CANADA.

DOOR-FRAME.

1,067,306. Specification of Letters Patent. Patented July 15, 1913.

Application filed April 8, 1912. Serial No. 689,226.

To all whom it may concern:

Be it known that we, WALTER EMILE CHARRON and LOUIS NAPOLÉON RICHARD, both subjects of the King of Great Britain, and residents of the city of Ottawa, Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Door-Frames, of which the following is a specification.

Our invention relates to improvements in tent doors and the like and the object of the invention is to devise a simple, effective and cheap tent door and frame, both of which can be readily taken apart for packing.

A further object is to construct a tent door and frame to which the canvas of the tent can be readily applied to and easily detached therefrom.

Our invention consists of a door frame comprising uprights, a cross bar extending across the top of the uprights, said cross bar being of greater length than the lateral distance between two uprights, bolts extending through the cross bar and down into orifices in the top of each upright, a lower cross bar near the bottom of the uprights, bolts extending through the uprights into orifices in the ends of the lower cross bar, hooks secured to the lower cross bar designed to engage pins on the uprights, braces straddling the ends of the upper cross bar and having divided lower ends designed to spring into apertures in the uprights of the frame, a door comprising uprights, cross bars extending across the bottom and top of the uprights, bolts adjacent to the ends of the cross bars extending through the same and down into the orifices in the ends of the uprights of the door, hooks secured to the inside faces of the uprights and designed to be inserted into eyes adjacent to the ends of the cross bars of the door in order to hold the uprights securely against the cross bars, braces of inverted U-shape extending though the upper cross bar on each side of the center thereof, the lower ends being designed to spring into apertures in the upright of the door, canvas having the edge thereof turned over around a rope, plates having a curved edge designed to be secured to the door and to the frame, the curved edge being so constructed as to bear against the beaded or roped edge of the canvas, and thus when the plates are secured to the door and frame the canvas will also be held thereto, all as hereinafter more fully set forth and described in the accompanying specification and drawings.

In the drawings: Figure 1 represents a front elevation of the door and frame. Fig. 2 represents a perspective detail of a corner of the door. Fig. 3 is a detail of one of the inverted U-shaped braces. Fig. 4 is a similar detail of one of the lower corners of the door. Fig. 5 is a perspective detail showing the brace applied to the upper cross bar of the frame. Fig. 6 is a sectional elevational detail showing the method of inserting the bolts into the members. Fig. 7 is a cross section of the edge of the canvas showing the method of inserting the rope into the edge thereof. Fig. 8 is a cross section broken away intermediately of the door and frame showing the plates for securing the edges of the canvas to the door and frame respectively.

In the drawings like characters of reference indicate corresponding parts in all the figures.

1 are the uprights of the frame. 2 is the upper cross bar thereof.

3 is the lower cross bar.

4 are the bolts extending through the upper cross bar and down into apertures in the ends of the uprights 1.

5 are bolts extending horizontally through the uprights and into orifices in the lower cross bar.

6 are hooks pivotally secured to the lower cross bar and designed to engage pins 7 on the uprights.

8 are braces of inverted U-shape straddling the ends of the upper cross bar, the lower ends being inserted into apertures in the upper ends.

9 are the uprights of the door. 10 and 11 are the upper and lower cross bars thereof respectively.

12 are braces of inverted U-shaped form extending through the cross bar 10 and the lower ends designed to be sprung into apertures in the uprights 9 of the door.

13 are pins extending through the cross bars and into orifices in the uprights of the door.

14 are hooks pivotally secured to the uprights of the door and designed to be inserted into eyes 15 secured to the cross bars

thereof. The lower ends 16 of the inverted U-shaped braces 8 and 12 are turned inwardly.

17 is the edge of the canvas turned over around the rope 18 and sewn at 19 to hold the rope therein, thus forming a beaded edge for the canvas.

20 are plates detachably secured to the door and frame by bolts 21. These plates have curved edges 22 designed to engage the beaded edge of the canvas and thus hold the same securely in place when the nuts of the bolts 21 are screwed up. 23 are hinges secured to one upright of the frame and door.

It will be seen that in order to take down the frame and door all that is necessary is to pull the ends of the braces 8 and 12 out of the apertures in the uprights of the disengaging door and frame and the hooks 6 and the frame will come apart. Similarly, by disengaging the hooks 14 the door will come apart.

The canvas is taken off by partially unscrewing the bolts 21 and loosening the plates 20 when the beaded edges of the canvas will be free to come away from the door and frame. In assembling the door the opposite takes place.

Of course it will be understood that our device can with equal facility be applied to windows as well as doors and window netting, sheet celluloid, talc or the like may be used for this purpose instead of the canvas and also netting of the different kinds may be used for the door if desired, instead of canvas.

In small conical shaped tents we may find it desirable to continue the uprights of the frame above the upper cross bars which will be situated between the two uprights and affix the brace to the projections of the uprights and to the upper cross bar thus saving a certain amount of width.

What we claim as our invention is:

In a tent door frame, a frame comprising uprights, top and bottom cross bars, means for attaching the material of the tent without penetrating it, comprising a cable or rope worked in the edge of said material, a groove in the outer edge of said door adapted to receive said rope containing edge and a metal plate having one edge bolted to the door and the other end bent, said bent end extending across said groove and around said rope and adapted to hold said rope containing edge in said groove.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

WALTER EMILE CHARRON.
LOUIS NAPOLÉON RICHARD.

Witnesses:
WM. A. MCMAY,
PEARLE M. GARROW.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."