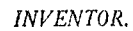


APPLICATION FILED SEPT. 8, 1917.

Patented Jan. 21, 1919.

2 SHEETS---SHEET 1.



Monroe Buck  
by David L. Linn  
his  
ATTORNEYS.

1,291,758.

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TENT FRAME.  
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2 SHEETS—SHEET 2.

Fig. 5

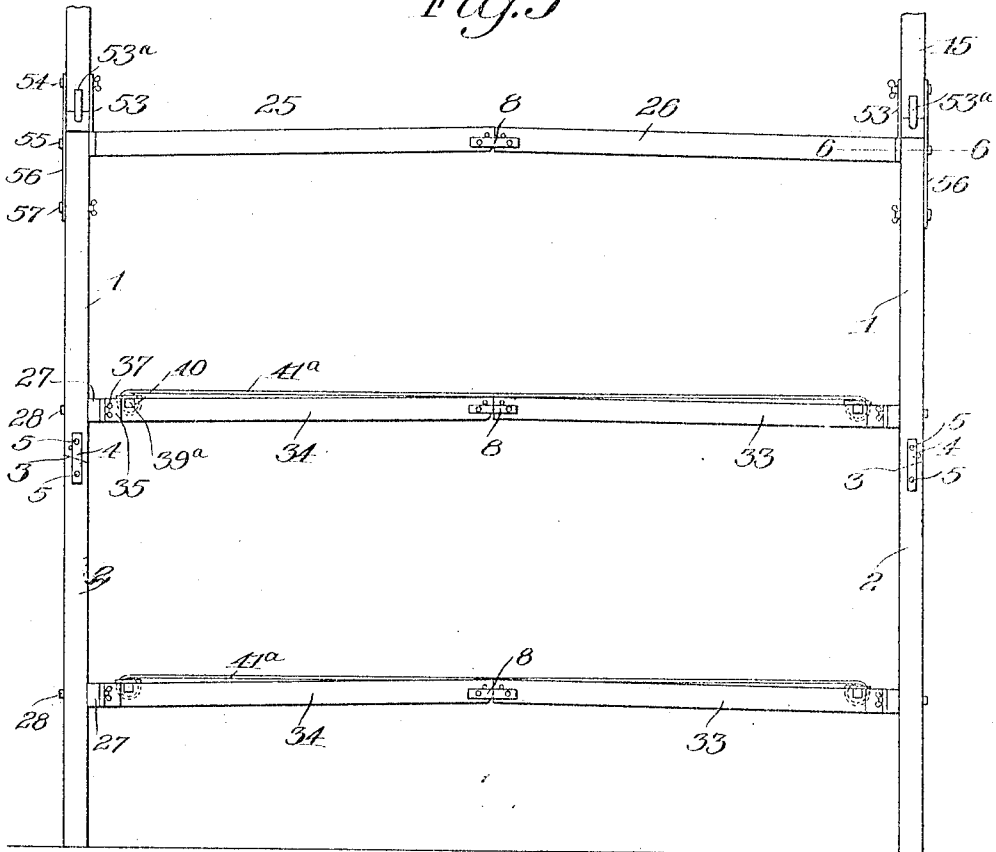
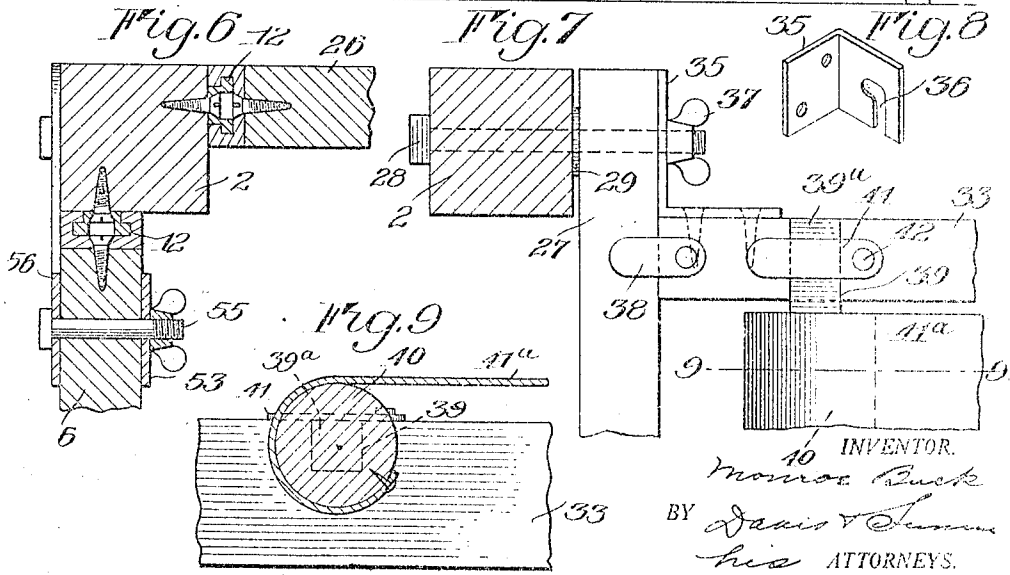


Fig. 6

Fig. 7

Fig. 8



INVENTOR.  
Moses Buck  
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# UNITED STATES PATENT OFFICE.

MONROE BUCK, OF GLENS FALLS, NEW YORK.

## TENT-FRAME.

1,291,753.

Specification of Letters Patent.

Patented Jan. 21, 1919.

Application filed September 3, 1917. Serial No. 190,411.

*To all whom it may concern:*

Be it known that I, MONROE BUCK, a citizen of the United States, and resident of Glens Falls, in the county of Warren and State of New York, have invented certain new and useful Improvements in Tent-Frames, of which the following is a specification.

The present invention relates to tent frames and an object therefore is to provide a light structure which may be compactly folded for storage in a small space and which when set up will be rigid and strong. Another object of the invention is to provide for mounting cots or berths in the tent so that they may be folded out of the way when not in use.

To these and other ends, the invention consists of certain parts and combinations of parts all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings:—

Figure 1 is an end view of a tent frame constructed in accordance with the present invention, showing two of the cots or berths in position for use, and the other two cots or berths folded to an out-of-the-way position;

Fig. 2 is a horizontal section on the line 2—2, Fig. 1;

Fig. 3 is a detail view of the hinged connection provided in the members employed in this structure;

Fig. 4 is an enlarged vertical section on the line 4—4 through one end of the ridge pole;

Fig. 5 is a side view of the tent frame, a portion of the top of the frame being broken away;

Fig. 6 is an enlarged sectional view on the line 6—6, Fig. 5, through one of the uprights, showing the connection between two tie beams and the uprights;

Fig. 7 is a detailed enlarged view, showing the connection between one of the berths and one of the uprights;

Fig. 8 is a detail perspective view of the device used on a berth for securing one of the side bars in position; and

Fig. 9 is a sectional view on the line 9—9, Fig. 7.

In the illustrated embodiment of the invention four corner posts or uprights are provided. Each of these uprights or corner posts is preferably formed in two sec-

tions 1 and 2. Preferably, these sections have their ends beveled and abutting at 3, and such sections are pivotally connected together by two plates 4 secured to opposite sides of the sections 1 and 2 by pivot-pins 5.

The four uprights are arranged at the four corners of the tent frame which is preferably of rectangular construction, and each two uprights are connected near their upper ends by a tie-beam which, in this instance, is in the form of two members 6 and 7 arranged with their proximate ends in abutment and at slight angles to each other, so that one acts as a brace to the other. In order to permit this tie-beam to fold, the two members are held together by plates 8 pivoted on opposite sides of the members at 9, one of the members being curved or cut away at 10 in order to permit the folding. Both members may be provided with pins 11 for engagement with the upper edges of the plates 8 in order to limit the folding action. The ends of these tie-beams are connected to their uprights detachably, preferably by means of interlocking connections 12 of any known construction, which will permit the tie-beams to be raised with reference to the uprights, but will limit the downward movement of the tie-beams on the uprights.

At the top of the tent frame a ridge pole 13 is provided, preferably of a construction like the tie-beams 6—7, and having its opposite ends supported by two rafters. Each of these rafters, in this instance, is formed in two sections 14 and 15, the upper sections 14 of the two rafters at one end of the ridge pole being spaced apart to receive the ridge pole between them, the ends of the rafters being beveled at 16 to abut the side faces of the ridge pole. These two upper sections of the rafters are preferably held together by two links 17 pivoted at opposite ends to the upper sections, as at 18, one of said links having one end of the ridge pole resting thereon, while the other of said links serves as an abutment for the adjacent end of the ridge pole, as is illustrated in Fig. 4. These links also serve as a means for anchoring the ridge pole to the rafters, and to this end are engaged on their under sides by a plate 19 through which a threaded stem 20 is passed, said stem also passing through the ridge pole and having a shoulder 21 engaging the upper face of the ridge pole. The nut 22 operates on the stem 20 and en-

gages the plate 19 so that the ridge pole is not only supported by the link 17 but is also tied to said links between the abutting ends of the rafters. The lower sections 15 of the rafters are hinged to the upper sections, as at 23, in a manner to permit the lower sections 15 to fold downwardly with reference to the upper sections.

The lower ends of the lower sections 15 are beveled so as to rest upon the adjacent tie-beam 6—7 in order to abut the portions 24 on the uprights 1—2, said portions projecting above the tie-beam. The rafters are held to these seats preferably by two braces on opposite sides of each end. The inner brace 53 is pivoted at 54 to the lower section 15 of the rafter, and at 55 to the tie-beam 6—7. The outer brace 56 is also secured at 54 and 55, and in addition is secured at 57 to the upper section 1 of the upright, thus tying a rafter, a tie-beam, and an upright together. Owing to the fact that the lower members 15 of the rafters fold downwardly, it is possible to connect the ridge pole 16 to the rafters before the rafters have been placed in position on the tent frame. The members 15 of the rafters will then serve as handles or grip pieces for raising the ridge pole to its proper position, after which the lower rafter sections are swung outwardly and seated at their ends against the projecting portions 24 of the uprights.

The uprights 1 and 2 may also be connected at the sides of the tent frame by tie pieces which are also in the form of cantalivers. These tie pieces embody two members 25 and 26 connected by a link or hinge member 8 like the tie beam 6—7, and detachably secured at their ends to the uprights 1 by interlocking connections 12, such as are employed for securing the tie-beams 6—7 to the uprights.

Below the tie piece 25—26, the uprights 1 and 2 are connected at the sides of the tent frame by berths or cot frames, preferably two on each side of the tent frame, one above the other, one berth or cot frame being connected to the upper section 1 of the uprights, while the other berth or cot frame is connected to the lower section 2 of the uprights. In this instance, each cot or berth frame embodies two transverse members 27 formed with bayonet slots at their inner ends and pivotally mounted on bolts 28 which are passed transversely through the uprights, a washer 29 being interposed between the transverse member and the upright. The outer ends of these transverse members are hinged at 30 to a longitudinal side piece which is in the form of a cantaliver embodying two members 31 and 32 (see Fig. 2), abutting at their ends and connected by links or hinge members 8 like the tie-beam 6—7. The opposite longitudinal

side of the cot or berth frame is also of a cantaliver construction, being formed of two members 33 and 34 connected by hinge links or plates 8 like the tie-beam 6—7. The ends of the longitudinal side 33—34 have angle plates 35 secured to the outer face thereof, one arm of each of said plates being provided with a bayonet slot 36 coincident with the bayonet slot in the transverse member 27, and fitting over the bolt 28, the thumb nuts 37 on the bolts 28 serving to hold the longitudinal side 33—34 in position, while at the same time permitting said side to be detached from the transverse members 27. Plates 38 pivoted to the upper face of the side 33—34 at opposite ends of the latter engage the upper faces of the transverse members 27 to prevent the swinging of the longitudinal seat 33—34 on the bolt 28 as a pivot.

The sides 31—32 and 33—34 of the cot or berth frames are provided with transverse grooves in their upper faces near opposite ends of said sides, and in these grooves 39 are received the squared ends 39<sup>a</sup> of two rollers 40, the rollers being held against turning in said grooves by the shape of the grooves, and also by plates 41 bridging the grooves above the squared portions 39<sup>a</sup> and pivoted to the sides at 42, in order that the rollers may be readily removed from the grooves. The rollers 40 are connected by a web 41<sup>a</sup> of canvas or other material, which will act to support a person in a reclining position. It is apparent that this web 41<sup>a</sup> may give any degree of tension by turning either one of the rollers 40. The rollers also serve as reels for holding the web when the tent frame is collapsed. Each cot or berth frame, it will be noted, is detachably connected to the upright, and its rear side cantaliver is detachably connected to the transverse members 27, so that said members may be folded upon the members 31 and 32, after which said members 31 and 32 may be folded one upon the other in order that all four members may lie in parallel relation. The two cantaliver sides of each cot or berth frame act to tie the side uprights together, and increase the rigidity of the tent frame as a whole.

To support the cots of the berth frames in operative or horizontal positions, a foldable brace is employed comprising an upper section 43 and a lower section 44, the two sections being pivotally connected at 45 and the upper sections having a bayonet slot 46 for engaging a headed stud 47 on one of the members of the tie-beam 6—7. Said upper section 43 also has a bayonet slot 48 for engaging a headed stud 49 on the side of the transverse member 27 of the upper berth. The lower member 44 of the brace has a bayonet slot 50 for engaging a headed stud 51 on the side of the transverse member 27 of the

lower berth. When the cots are folded to the uppermost position, as shown at the right-hand side of Fig. 1, the brace 43—44 may be employed for connecting the tie-beam 6—7 with the lower section 2 of an upright, the bayonet slot 50 then being connected to a headed stud 52 on the side of the upright.

No covering is shown on the tent frame as any suitable covering may be employed. The pins 53<sup>a</sup> may be used for securing the covering in place.

From the foregoing it will be seen that there has been provided a tent frame in which the uprights are connected by cantalivers and also act as supports for cots or berths which may be folded between the uprights. These cots or berths have cantaliver sides which tend to tie the uprights more strongly together. Foldable braces support the cots in operative positions and these braces are so hung that they tend to further strengthen the tent frame. The cots are detachable from the uprights and may be compactly folded and the uprights are formed in sections to which the cots are so connected that great strength is secured. The ridge pole is a cantaliver and the rafters are so formed and mounted that the ridge pole may be connected to them before the rafters are mounted on the uprights.

What I claim as my invention and desire to secure by Letters Patent is:—

1. A tent frame having a ridge pole formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends.

2. A tent frame comprising uprights, and tie beams connecting the uprights and each formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends.

3. A tent frame comprising four uprights, tie beams connecting said uprights near their upper end and each formed by two members arranged at slight angles to each other with their proximate ends abutting, and lying in a higher plane than their outer ends, two pairs of rafters abutting the uprights above the tie beams, and a ridge pole connecting said two pairs of rafters and formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends.

4. A tent frame comprising four uprights, tie-beams connecting the uprights, two pairs of rafters resting on two of the beams and abutting the uprights at the ends of said tie-beams, and a ridge pole connecting the two pairs of rafters and arranged between the members of each pair.

5. A tent frame comprising a ridge pole,

a pair of rafters having the ridge pole arranged between their adjacent ends, two parallel links pivoted at opposite ends to the two rafters on common axes, at least one of said links having a ridge pole supported thereon, a plate engaging said links on their under sides, and a bolt passing through the plate and the ridge pole and between the links.

6. A tent frame comprising four uprights, tie-beams connecting the uprights, a cot pivoted to two of the uprights below one of the tie-beams, and braces connecting the cot with two other beams.

7. A tent frame comprising four uprights, tie-beams connecting said uprights, two cots pivotally supported on two of the uprights, and two two-section braces, the sections of which are pivotally connected, and each brace having the upper portion of its upper section secured to a tie-beam, the lower portion of its upper section detachably secured to the upper cot, and the lower portion of its lower section detachably secured to the lower cot; means being also provided on the uprights whereby the lower portions of the braces may be secured to the uprights when the cots are swung upwardly.

8. A tent frame comprising four uprights, tie-beams connecting said uprights and each having the form of two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, a cot supported by two of the uprights below one of the tie-beams, and braces extending from said cots to two other of the tie-beams.

9. A tent frame comprising four uprights, tie-beams connecting said uprights and each having the form of two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, a cot supported by the two uprights below one of the tie-beams and having its side rails each formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, and braces extending from said cot to two other of the tie-beams.

10. A tent frame comprising four uprights, tie beams connecting said uprights, and each being in the form of two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, two cots supported between two of the uprights, each of said cots having its transverse pieces pivoted to the uprights and its longitudinal sides in the form of two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, and

two two-section braces, the sections of which are pivotally connected, and each brace having the upper position of its upper section secured to a tie-beam, the lower portion of its upper section detachably secured to the upper cot, and the lower portion of its lower section detachably secured to the lower cot; means being also provided on the uprights whereby the lower portions of the braces may be secured to the uprights when the cots are folded between the uprights.

11. A tent frame having a tie-beam therein formed of two sections arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, and links pivotally connecting the sections and permitting the folding of the tie-beam.

12. A tent frame comprising four uprights, each formed with an upper and a lower section, tie-beams connecting the upper sections of the uprights and each formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, two cots, one connecting

the upper section of the two uprights below one of the tie-beams, and the other connecting the lower section of the same two uprights, and braces connecting the cots with two other tie-beams.

13. A tent frame comprising four uprights, each formed with an upper and a lower section, tie-beams connecting the upper sections of the uprights and each formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, a connection between the upper sections on opposite sides of the tent frame, formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends, and a connection between the lower sections of the two uprights on opposite sides of the tent frame, formed by two members arranged at slight angles to each other with their proximate ends abutting and lying in a higher plane than their outer ends.

MONROE BUCK.