(No Model.)

S. W. CLEMENT.

FOLDING TENT FRAME.

No. 439,384. Patented Oct. 28, 1890.

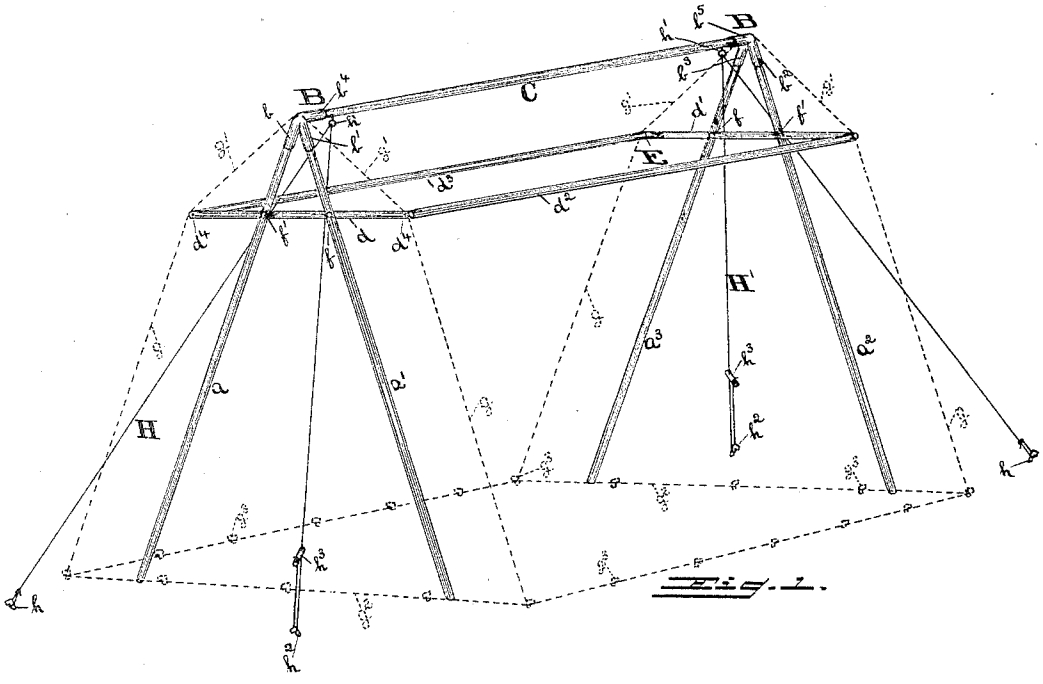

Fig. 1.

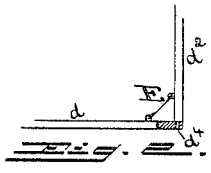

Fig. 2.

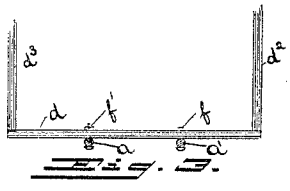

Fig. 3.

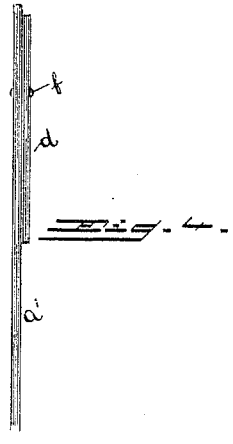

Fig. 4.

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STEPHEN W. CLEMENT, OF PHILADELPHIA, PENNSYLVANIA.

FOLDING TENT-FRAME.

SPECIFICATION forming part of Letters Patent No. 439,384, dated October 28, 1890.

Application filed May 2, 1890. Serial No. 350,260. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN W. CLEMENT, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Folding Tent-Frames, of which the following is a specification.

My invention has relation to wall-tents, and has for its object the provision of novel, simple, and efficient means for sustaining the same in position for use without necessitating the employment of the usual guy-ropes, thus effecting a great reduction in the amount of ground-space requisite for the occupation of the tent.

My invention consists in certain details of construction and in the combinations of parts, as hereinafter more fully described, and specifically illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the tent-supporting frame complete and in position for use with the canvas thereon showing in dotted lines. Fig. 2 is detail in plan, partly in section, of the method of fastening the sides and ends of the frame together. Fig. 3 is a plan view of one end and portions of the sides of the frame, showing the method of fastening the frame to the uprights or poles. Fig. 4 is a side elevation of part of one of the poles, showing the position of the end pieces when the frame is taken apart.

a a' a^2 a^3 represent the uprights or poles, which at their lower ends merely rest on the surface of the ground and at their upper ends are fitted into sockets in the legs b b' b^2 b^3 of the metallic brackets B B′, which legs are divergent from their inner to their outer ends, so that the poles will slant outwardly from the apex of the tent to such degree as to allow of a free entrance through the ends of the tent, in contradistinction with the obstructed entrance to the usual form of tent employing a vertical pole which stands directly in the middle of such entrance.

b^4 b^5 are oppositely-disposed arms of the brackets B B′, standing at right angles with the legs of the latter and in a horizontal plane, which arms have sockets therein for the reception of the ridge-pole C, which ridge-pole is securely held in said sockets, so that when the uprights are withdrawn from their sockets, which they are easily capable of, the brackets will remain on the ends of the ridge-pole and are practically a part thereof, thus obviating danger of their becoming lost or misplaced. So far the uprights, ridge-pole, and brackets combined, as hereinbefore described, form a very efficient support for the canvas of the ordinary A-tent, leaving unobstructed entrances thereto, as aforementioned.

d d' d^2 d^3 represent the end and side pieces of a rectangular frame of such dimensions as is required by the size of the tent and the required shape, said end pieces d d' having transverse openings therein near their ends for the reception of pins d^4 in the ends of the side pieces d^2 d^3, as shown clearly in Fig. 2 of the drawings, which pins are secured against accidental disengagement from their openings by hooks E. These pins may be metallic and driven or otherwise secured in the side pieces, or such side pieces may be reduced in size at their ends to form pins integral therewith. Furthermore, the particular form of fastening for the side and end pieces need not necessarily be a hook, although the same is preferred.

The rectangular frame is supported inside of and on the uprights a a' a^2 a^3 at such a distance from the ground as to not impede the free entrance to the tent and yet at such a distance from the apex of the latter as to permit of a sufficient slant being given to the roof of the tent to shed freely any water which may fall thereon and such a height of wall as to render the proportions of the tent most graceful. The particular means for the support of the frame consists of a pin or pivot f, passing through the uprights a' a^3 and the end pieces d d', and provided with heads to prevent the disengagement of said uprights and end pieces and allow of the latter swinging freely on the pins f. Such means further consist of a bolt f', in alignment with the pin f and passing through the uprights a a^2 and the end pieces d d', said bolts being prevented from displacement by their heads and nuts, and the latter when unscrewed permit of the disengagement

of the end of the end piece from the bolt and the swinging of the same on its pivot, as above suggested.

In Fig. 1 of the drawings the canvas is represented by dotted lines, g representing the wall and g' the roof lines.

g^2 represents the ground-line, and g^3 the usual pegs for securing the lower edges of the canvas to the ground.

It will be observed that instead of having to use guy-ropes for keeping the walls of the tent and the roof at the proper angle relatively to each other, which guy-ropes necessarily extend to a great distance from each side of the tent to their pegs, so that they may be in alignment with the roof-line and prevent the placing of wall-tents side by side in close relation, the desired end is attained by the provision of the side bars which support the canvas at the point at which the guy-ropes would from the inside and wholly prevent the sagging of the same at such point. Thus the necessity of loosening the ropes in damp weather to ease the strain consequent upon the shrinking of said ropes and the canvas and tightening them again in dry weather is entirely dispensed with, as is also the use thereof.

To relieve any tendency toward swaying of the tent-frame in the direction of its length—for instance, in a high wind—guy-ropes H H′ are provided, which are fastened permanently at one end to the pegs h, pass through the ventilator-openings of the tent and through eyes h' in the ridge-pole C, back again through the ventilator, around the pegs h^2, and finally are secured to the usual form of slides h^3, through which these ropes pass in the usual manner before passing around the last-mentioned pegs. Thus, by reason of the ropes H H′ being continuous, the tightening of the same at the end on which is the slide h^3 obviously tightens the portion of said ropes between the eyes h' and the pegs h. At the same time, under ordinary circumstances, these ropes are not absolutely necessary, and can be dispensed with without affecting the efficiency of the frame and supports therefor.

Wall-tents supported in the manner herein-before described can be placed side by side in close relation, and the space occupied by a single one is less than half that occupied by the ordinary form of wall-tent with its guy-ropes.

To fold or knock down the tent-frame after the canvas has been removed therefrom and the guy-ropes H H′ disengaged from their pegs, the bolts f' are withdrawn, allowing the end pieces to swing on the pivots f into the position shown in Fig. 4, the side pieces d^2 d^3 having been first disconnected by loosening the hooks E and drawing the pin ends of the side pieces from their openings in the end pieces. Then the uprights are withdrawn from the sockets in the brackets B B′, and, finally, the said uprights, side pieces, and ridge-pole are bundled up for convenience of transportation. By reversing the order of procedure above described the support is placed in condition for the reception of the canvas.

What I claim as my invention is as follows:

1. The combination of a frame, a pair of slanting poles at each end of and supporting said frame, and the body of a tent, the latter being sustained from the inside by said frame at the junction of its walls and roof, substantially as shown and described.

2. The combination of a sectional frame detachably secured at its ends to a pair of slanting poles and sustaining the body of a tent from the inside at the junction of its walls and roof, substantially as shown and described.

3. The combination of a pair of slanting poles at each end of and supporting the ridge-pole of a tent, a sectional frame with its ends pivoted on one of each pair of poles and detachably secured to the other one and sustaining the body of a tent from the inside at the junction of its walls and roof, substantially as shown and described.

4. The combination of the poles a a' a^2 a^3 and the ridge-pole C, secured in the brackets B B′, the end pieces d d', and the side pieces d^2 d^3, the former being pivoted on the pins f in the poles a' a^3 and bolted at f' to the poles a a^2 and the latter sustaining the body of a tent from the inside at the junction of its walls and roof, substantially as shown and described.

5. The combination of the poles a a' a^2 a^3 and the ridge-pole C, secured in the brackets B B′, the eyes h', the ropes H H′, passing through said eyes, each having one of their ends permanently and the remaining end adjustably secured to pegs, the end pieces d d', and the side pieces d^2 d^3, the former being pivoted on the pins f in the poles a' a^3 and secured to the poles a a^2 by the bolts f' and the latter sustaining the body of a tent from the inside at the junction of its walls and roof, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of April, A. D. 1890.

STEPHEN W. CLEMENT.

Witnesses:

WM. H. POWELL,

R. DALE SPARHAWK.