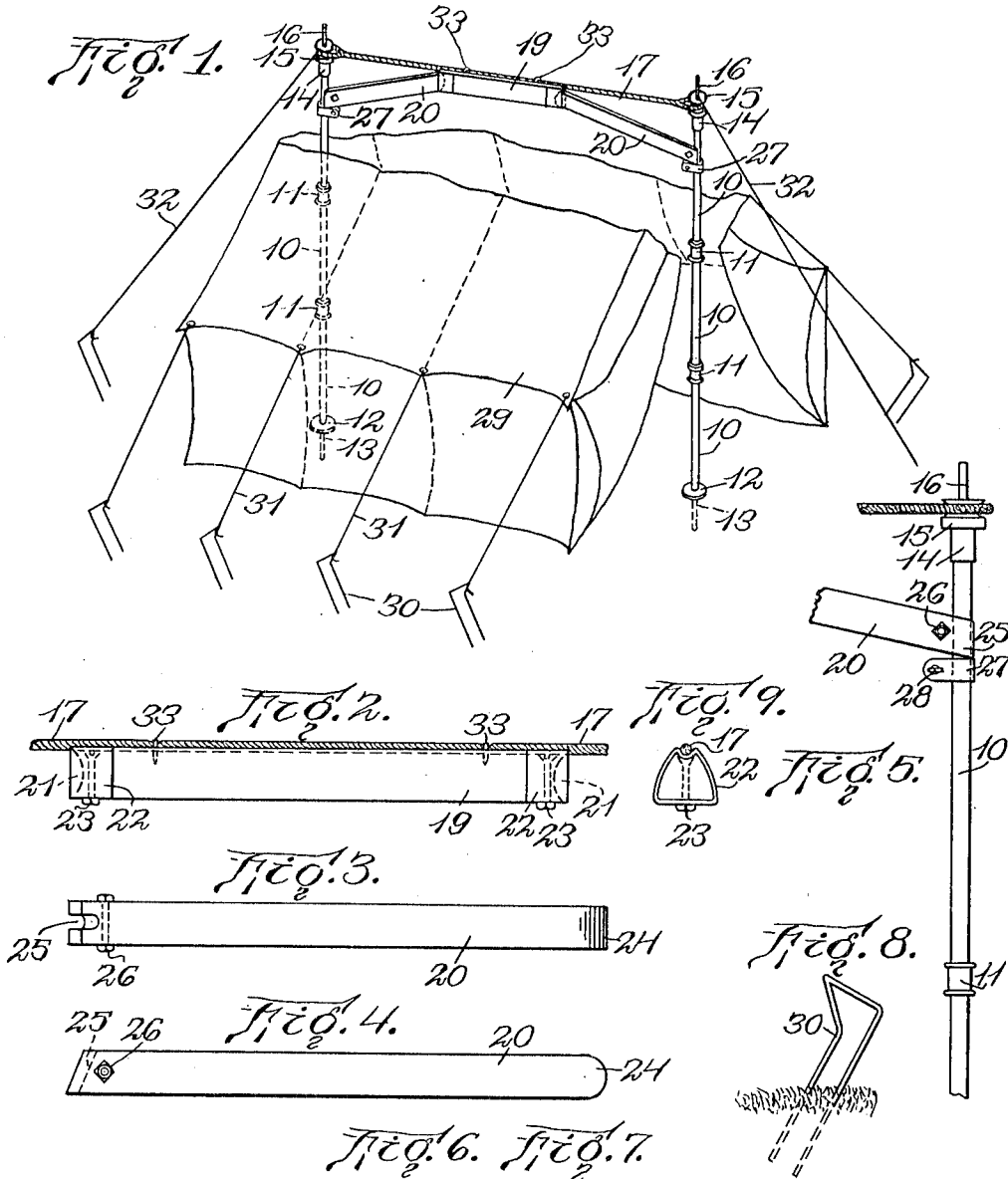


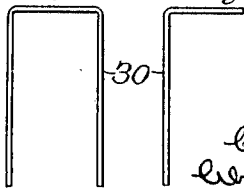
H. O. WELLMAN.
TENT SUPPORT.
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1,089,803.

Patented Mar. 10, 1914.



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UNITED STATES PATENT OFFICE.

HENRY ORRIS WELLMAN, OF SOMERVILLE, MASSACHUSETTS.

TENT-SUPPORT.

1,089,803.

Specification of Letters Patent.

Patented Mar. 10, 1914.

Application filed February 5, 1913. Serial No. 746,392.

To all whom it may concern:

Be it known that I, HENRY ORRIS WELLMAN, a citizen of the United States, residing at Somerville, in the county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Tent-Supports, of which the following is a specification.

This invention relates to tents, and has particular reference to the means for supporting the same in position for use.

One of the objects of the invention is to provide supporting devices for tents which are strong, and yet collapsible to a small compass to facilitate transportation of the same.

A further object is to provide an improved ground pin for the guy-ropes employed to properly hold a wall tent.

To these ends the invention consists in the improvements which I shall now proceed to describe and claim.

Of the accompanying drawings,—Figure 1 is a perspective view of a tent held by my improved supporting devices, the upper portion of the tent proper being broken away to more clearly illustrate the invention. Fig. 2 is a side elevation of the center piece for supporting the ridge of the tent. Figs. 3 and 4 are, respectively, plan and side views of the braces employed in connection with the center piece shown in Fig. 2. Fig. 5 is a side elevation of one of the uprights and portions of the devices cooperating therewith. Figs. 6, 7 and 8 are, respectively, front and side elevations, and a perspective view of the improved ground pins or staple-pins for the guys of the tent. Fig. 9 is a view looking from the right of Fig. 2.

Similar reference characters indicate similar parts in all of the views.

The two uprights or poles 10 are made of three sections, and are conveniently made of common steam-pipe. They may vary in size and length according to size of the tent. The sections are removably connected by ordinary beaded, threaded couplings 11. The lower end of the lower section is preferably formed or provided with a flange 12 to bear upon the surface of the ground, to prevent the pole from sinking in too deeply. A pin 13 indicated by dotted lines in Fig. 1, and of a size to enter the lower end of the tubular lower section 10, is preferably employed. Two such pins 13, when driven into the ground properly spaced, will determine the

spacing of the two uprights or poles 10. The upper end of the upper section of each upright is formed or provided with a shoulder coupling or collar 14, having a grooved enlargement 15, a pin or stud 16, projecting upwardly for the same purpose as the usual pin, at the upper ends of the tent poles, such pins entering suitable gromets in the tent cloth. A rope 17 of proper length, having end loops 18 to engage the grooved enlargements 15, is preferably employed to support the peak of the tent cloth.

To exert spreading pressure against the uprights and upward pressure against the ridge, I employ a center piece 19 and two braces 20, these three members being of substantially equal length. These three pieces are preferably made of suitable hardwood. The center piece or strut 19, tapers toward its upper edge, as best shown in Fig. 9, and said upper edge is longitudinally grooved to receive the ridge rope 17. The tapering upper edge of the member 19 enables it to fit the top of the tent quite snugly, whether a rope 17 is employed or not. The ends of the center piece or strut 19 are recessed, as at 21, said ends being strengthened by ferrules 22 having transverse screws or bolts 23, the recesses 21 receiving the round ends 24 of the two braces 20, the other ends of the braces 20 being recessed or grooved, as at 25, to engage or straddle the uprights 10, as clearly shown in Fig. 1. To prevent the outer ends of the braces from splitting, I preferably reinforce or strengthen the same by transverse bolts or screws 26.

Mounted on each upright 10 is an adjustable stop 27, having a clamp screw 28, by which it may be tightened on the upright after being adjusted vertically thereon.

The tent 29 is shown as the well known wall type. Such tents, as is well known, have at each end of the peak a gromet to fit over the pin at the top of the post or upright. Such structure being well known, I have not deemed it necessary to illustrate it in the drawings. To set up such a tent it is only necessary, after the uprights have been placed in position as shown in Fig. 1, to slip the gromets of the tent 29 over the pins 16. To then tighten the ridge, the adjustable stops 27 are pushed upwardly so as to slide the recessed ends of the braces 20 up, so that the rounded ends of the braces will act upon the center piece or strut 19 to elevate the latter. Such elevation, of course, is limited

by the rope 17, or by the tent cloth above the rope, and the reaction through the braces 20 spreads the upper ends of the uprights and increases the tightness of the ridge.

5 The usual guys of the tent are connected to suitable pins 30 which have angular and pointed upper ends. These pins are driven into the earth, as indicated in Figs. 1 and 8, and the side guy ropes or cords 31 are connected to the apex of the angular tops of the staples. As such staples can be driven into the ground at such an angle, and to such an extent that the tops of the straight pins will be flush with the surface of the ground, the strain or pull will then be exerted in a direct line of the bent upper ends of the staple-pins. The usual end guys 32, are shown as connected to staple-pins of the same form as those at the sides of the tent.

20 While the center piece or strut may be independent of the ridge rope 17, and capable of being packed up for transportation alongside of the braces 20, I prefer for some purposes to have the said center piece or strut 19 connected to the mid-length of the ridge rope 17, as by suitable pins or staples 33 (Fig. 2) driven through the rope into the strut 19.

To set up a tent, I place the pins 13 in the ground the desired distance apart to correspond with the length of the ridge rope, or the distance between the loops 18, the ends of the pins 13 projecting a short distance above the ground. I then couple the sections of the uprights together and place them over the pins 13, with the foot flanges 12 bearing upon the ground. The loops of the ridge rope are then slipped over the grooved enlargements 15. I then throw the tent over the ridge and cause the pins 16 to project through the usual gromets employed in the peak or apex of the tent, and I then attach the guy ropes of the tent to the staple-pins, for the same purpose as that when ordinary wood stakes or tent pins are employed. As is well known, the guy ropes would extend from the ground at the proper distance to pull exactly in line with the slant of the roof of the tent when the walls thereof are pinned to the ground and intended to be vertical and taut. Assuming that the center piece or strut 19 is in place, depending from the mid-length of the ridge rope, I place the braces 20 in position by inserting their rounded ends in the recesses of the center pins 19, the outer ends of the braces 20 spanning the uprights. I then press the outer ends of the braces upwardly until the ridge becomes straight and taut, the stops 27 being then slipped upwardly and clamped, to hold the braces in the position to which they have been adjusted. This structure as

a whole, forms an arched support for the ridge, said support tightening the ridge of the tent. The operation described results in drawing or straining the roof of the tent in different directions, making it very taut, and hence, rendering it more waterproof than when slack. If rain or dampness renders it undesirable for occupants of the tent to go outside to slacken the guys, the necessary slackening can be obtained from the inside of the tent by loosening the stops 27 and permitting the braces to slide down. Or said braces might be removed until it is again desired to tighten up the ridge.

I do not consider it always necessary to employ the ridge rope 17, because the peak of the tent itself, owing to its gromets fitting over the pins 16, might serve to take the pressure of the arched support 19, 20 in the same manner as has been described in connection with the tightening of the ridge rope 17.

I do not herein claim the staple-shaped pins illustrated and described, as the same forms the subject matter of a divisional application filed November 18, 1913, Serial Number 301,604.

I claim:—

1. A tent support comprising uprights, a flexible ridge for connecting the upper portion of the uprights, and means for simultaneously exerting spreading pressure against the uprights and upward pressure against the ridge, said means comprising a center piece and braces adapted to engage the ends of the center piece and the uprights.

2. A tent support comprising uprights, a flexible ridge for connecting the upper portion of the uprights, and means for simultaneously exerting spreading pressure against the uprights and upward pressure against the ridge, said means comprising a center piece having end recesses, and two braces, each having one end formed to enter an end recess of the center piece and having the other end recessed to engage an upright, and adjustable clamps carried by the uprights.

3. A tent support comprising uprights, a flexible ridge for connecting the upper portion of the uprights, and means for simultaneously exerting spreading pressure against the uprights and upward pressure against the ridge, said means comprising a center piece having a narrow upper edge to fit the top of a tent, and braces to engage the ends of said center piece and the uprights.

In testimony whereof I have affixed my signature, in presence of two witnesses.

HENRY ORRIS WELLMAN.

Witnesses:

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AUBREY S. McLELLAN.