

W. W. WELLS.  
Improvement in Tents.

No. 132,610.

Patented Oct. 29, 1872.

Fig. 1

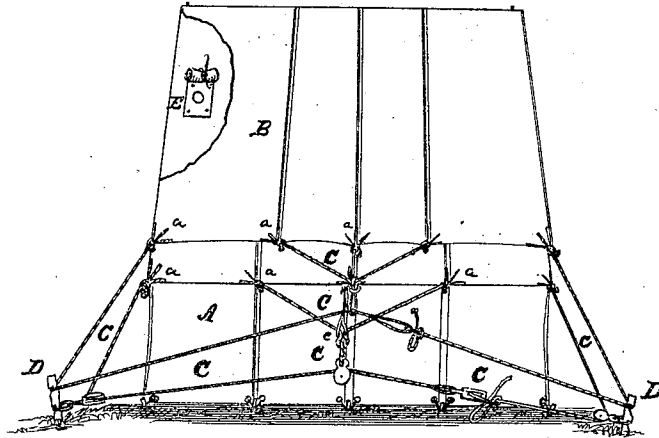
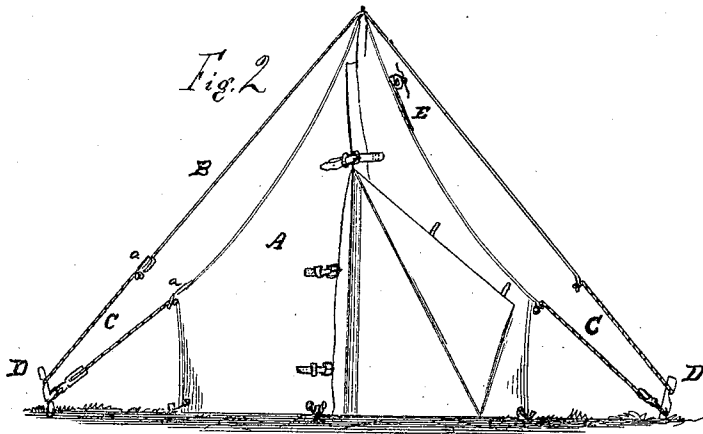


Fig. 2



Witnesses

*John Foster*  
*E. H. Brown*

Inventor.

*William W. Wells*  
By *Guidley & Warner*  
Attys

# UNITED STATES PATENT OFFICE.

WILLIAM W. WELLS, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN TENTS.

Specification forming part of Letters Patent No. **132,610**, dated October 29, 1872.

*To all whom it may concern:*

Be it known that I, WILLIAM W. WELLS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wall-Tents, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, and in which—

Figure 1 represents a side elevation of a tent provided with my improvements; and Fig. 2, a front elevation of the same.

Like letters of reference indicate like parts.

My invention relates to that class of tents usually employed for army purposes; and it consists in a novel manner of applying the cordage to the tent so that the strain upon the latter will be more evenly distributed; it also consists in a novel arrangement of the cordage so that one or more of its strands may be readily strained by being carried and attached to another strand; the object of this part of my invention being to equalize the strain and render the tent capable of being more readily set, removed, and transported, and more cheaply constructed.

In the drawing, A represents a tent, and B its fly. C is the cordage, and D D are stakes to which it is attached. I attach the cordage to the tent in diverging strands, or "crow-feet," as shown at *a*. I deem it preferable, but not essential, to make the crow-feet separate from the remaining parts of the cordage, and to make their strands terminate in a free loop at their junction, so that the strain may be applied to the loop so formed. The crow-feet are also arranged upon the tent in such a manner that the central strand lies in the direction of the strain, and the other strands in such a direction as to distribute the strain as evenly as possible.

Instead of attaching a separate cord to the loop of each crow-foot and employing a separate stake for each cord, I arrange the cordage and stakes in the following manner: A cord, having a knot at one end and a loop at the other, is passed through the loop of the

central crow-foot, the knotted end being for the purpose of preventing the cord from being drawn entirely through the loop. Another cord is then passed through the loop of each adjacent crow-foot and knotted at each end; this cord is then passed through the loop of the central cord, and the latter loop is then passed through the loop formed by the passage of the former cord through the loop of the latter, so as to leave a loop at the junction of the cords so united, as shown at *c*. The length and direction of these cords are such that a strain exerted upon the loop at their junction will be evenly distributed to the crow-feet which suspend them. Knotted cords are also passed through the loop of the crow-foot upon the corners of the tent, and from thence they are carried to notched stakes so arranged that when the cords are tightened the tent will be strained longitudinally, laterally, and downward; the free end of one of these cords is looped and carried through the loop of the web suspended by the inner crow-feet; the other cord is carried from its stake, passed through the loop of the other staked cord, tightened, and then tied. The fly may also be secured and strained in the same manner.

I deem it preferable, not essential, to employ pulleys and blocks in connection with the tent, cordage, and stakes, and to provide each stake with two notches, so that each cordage may be arranged in separate notches, as shown; and I do not here intend to limit myself to the precise mode herein described relating to the formation and arrangement of loops and knots, as these details are immaterial so long as the cordage is applied and arranged substantially as herein set forth.

I also deem it preferable to employ straps and buckles instead of cords for the purpose of fastening together the canvas at the entrance-way of the tent, as shown.

The bottom of the walls of the tent is held to the ground in the usual manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The "crow-foot" attachment of the cordage to the tent and to its fly, and to either, substantially as and for the purposes specified.

2. The cords C C, attached to a tent and carried to stakes, in combination with one or more cords attached to the same tent and carried to the said staked cords, substantially as and for the purposes specified.

3. The herein-described arrangement of the cordage C C in connection with a tent and stakes, substantially as specified.

WILLIAM W. WELLS.

Witnesses:

F. H. BROWN,  
F. F. WARNER.