

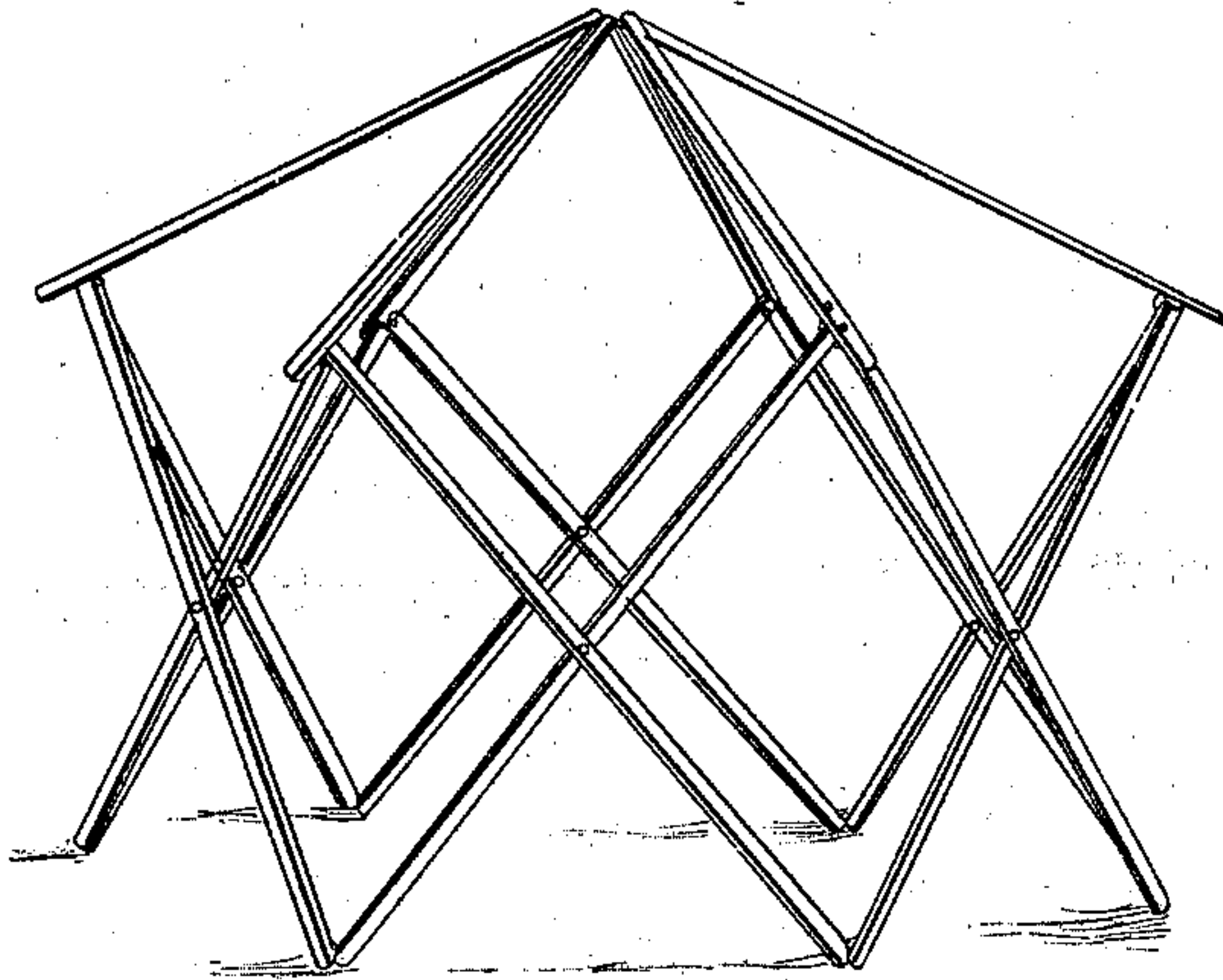
*N. Cross,*

*Tent.*

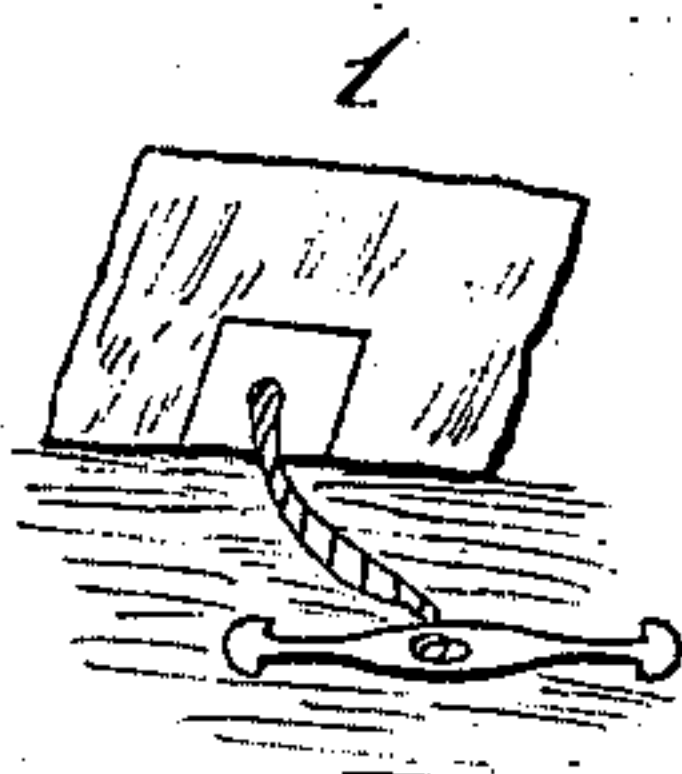
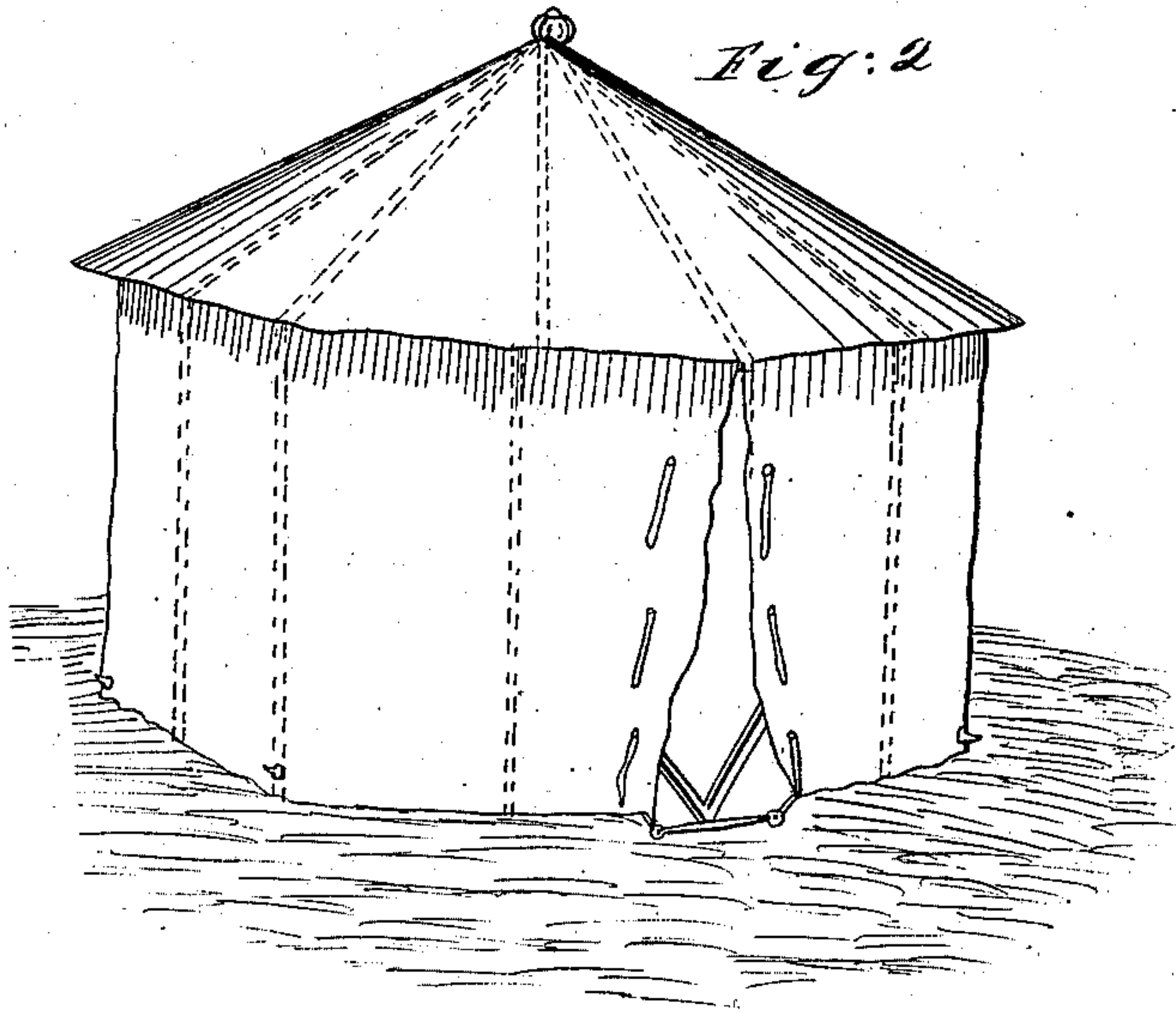
*N<sup>o</sup> 39721.*

*Patented Sep. 1, 1863.*

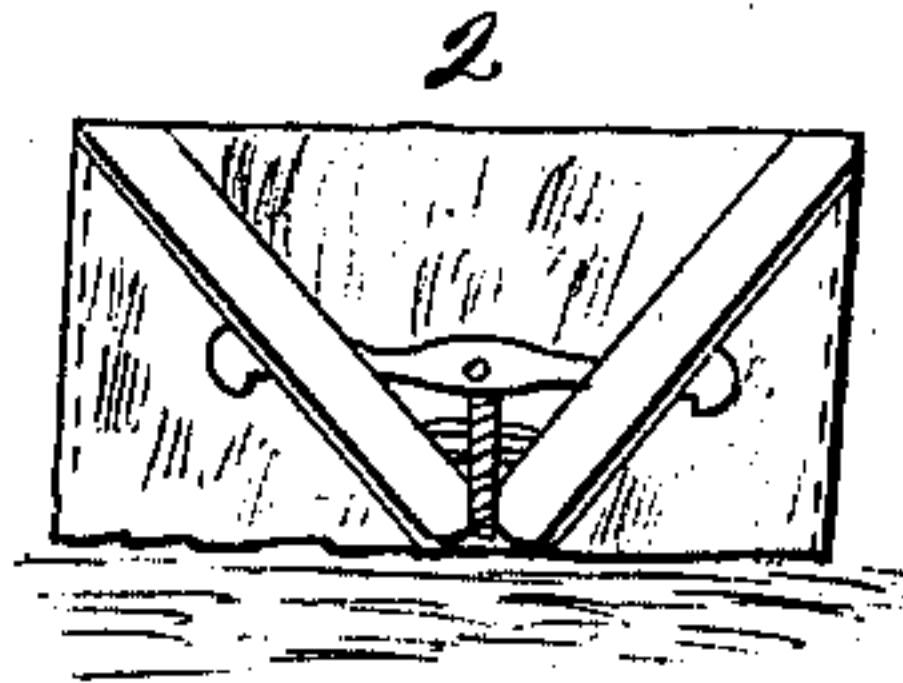
*Fig: 1.*



*Fig: 2.*



*A*



*Witnesses:*

*Maj. W. L. Van Wyk*

*Capt. W. C. Germany*

*Inventor:*

*Nelson Cross*



# UNITED STATES PATENT OFFICE.

NELSON CROSS, OF NEW YORK, N. Y.

## IMPROVEMENT IN TENTS.

Specification forming part of Letters Patent No. 39,721, dated September 1, 1863.

*To all whom it may concern:*

Be it known that I, NELSON CROSS, of the city, county, and State of New York, have invented a new and improved field tent or marquée, particularly adapted to the use of army officers in active field-service; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings or representations of the same.

In overcoming existing objections to the several kinds of army-tents in common use, the points sought to be attained by my invention are simplicity, strength, and cheapness of construction, together with firmness and economy of room when pitched, and lightness, compactness, and security against damage when folded and packed for transportation.

My invention consists of a light lattice and divergent frame-work of wood, around which the tent-cover is drawn and fastened at suitable points by easy and simple contrivances. This frame is constructed of more or less straight bars or slats of wood, according to the required dimensions of the tent, and which, when fastened together, as hereinafter described, form the skeleton of the sides and roof, the several parts holding such a mathematical relation to each other as to make nearly an equal distribution of whatever lifting or depressing strain the tent may be subjected to at any particular point.

Figure I represents a hexagonal frame, with a conical roof extended to its proper proportions, for receiving the tent cloth or cover. The sectional sides consist of two cross-bars, riveted together at a point equidistant from their four extremes, and coupled at their upper and lower ends by means of wire staples adjusted in such manner as to admit of a free action in opening apart or closing upon the center. The rafter-bars, corresponding in number to the several sides, are united at their interior or upper ends by a wire ring passed through an eye, thus holding them firmly together at the apex of the frame, from which they are made to diverge, passing over and beyond the upper couplings of the side sections a distance equal to the width of the eaves, and being made fast to the side frame at the point of contact therewith by means of self-adjusting keyed bolts or their mechanical equivalent. Thus constructed, the frame is

complete. It may consist, however, of any required number of sectional sides, with a corresponding number of rafter-bars, with diminutions of length or height corresponding to the required size of the tent.

Fig. II represents the marquée complete and ready for occupation. The cover is fitted and made fast to the frame by means of pockets, into which the rafters are inserted at their divergent extremes, thus forming and holding in place the eaves projection of the tent proper, which is also made fast to the apex of the frame by passing a rope through to the inside and knotting the two ends upon leather or canvas washers, thus confining the cover to the rafters and preventing its chafing at the point which is subjected to the more constant wear. The sides are securely fastened to the frame on a level with the ground by means of short double-headed wooden or metallic pins, attached at the middle and fastened to the cover by a small cord, a few inches in length, which is passed under the lower ends of the united side bars at the point of coupling, the pins being carried through and behind the wall-bars from the inside immediately above the coupling in the manner of ordinary staple-bolts or T-bars, as illustrated in fractional drawings A, Figs. 1 and 2, thus answering the double purpose of confining the cover and securing the frame in its extended position without the aid of ground-pins or guys. The tent may be anchored to the ground by confining the frame in any convenient manner when the action of high winds renders it necessary. The entrance is formed over some one of the diamond openings of the frame in the ordinary manner with tents now in use, the same being closed at the bottom by a wooden bar or pin equal in length to twice the width of the lap or fold, and attached by the ends, respectively, to the lower verge of the inner and outer folds, so that when otherwise unfixed the tent may be readily drawn apart at the opening or closed by simply turning the bar end for end and confining it in a horizontal position.

One great advantage which this tent possesses over any hitherto produced is that, inasmuch as it is extended and pitched without depending at all upon the covering to sustain it in position, the same may be composed of a light thin material, especially for summer use, which may be rendered impervious to water



by simply oiling the top, the eaves projection whereof, for the most part keeping the walls dry. Another advantage is that the walls may be raised upon the frame to any required height with little trouble and without disturbing the pitch, thus leaving a mere pavilion-cover and giving free circulation to the air. Another and still greater advantage is that more room is obtained, with less weight to carry, and consequent increased facility of transportation either in wagons or upon pack-mules, over any other form of tent.

I make no claim to originality in the application of an interior frame-work of wood to field-tents, nor in dispensing with guys in the pitching; but

What I claim as my invention is—

1. The construction of an adjustable wall-

tent frame with more or less angular sides, conical roof, and eaves-brackets, wholly composed of straight pieces of wood, the body of which is joined together in a lattice form, and made capable of extension for occupancy or depression for transportation without altering or disturbing the fastenings, while affords between the diamond openings of the frame when extended an ample and convenient entrance-way.

2. The combination of the several parts of the frame and the form and mode of attaching and distending the cover, as heretofore described, and as and for the purposes aforesaid.

NELSON CROSS.

Attest:

H. L. VAN NESS,  
W. O. DERMODY.