No. 627,626. Patented June 27, 1899.

G. W. OWENS.

TENT.

(Application filed July 12, 1898.)

(No Model.)

Fig. 1.

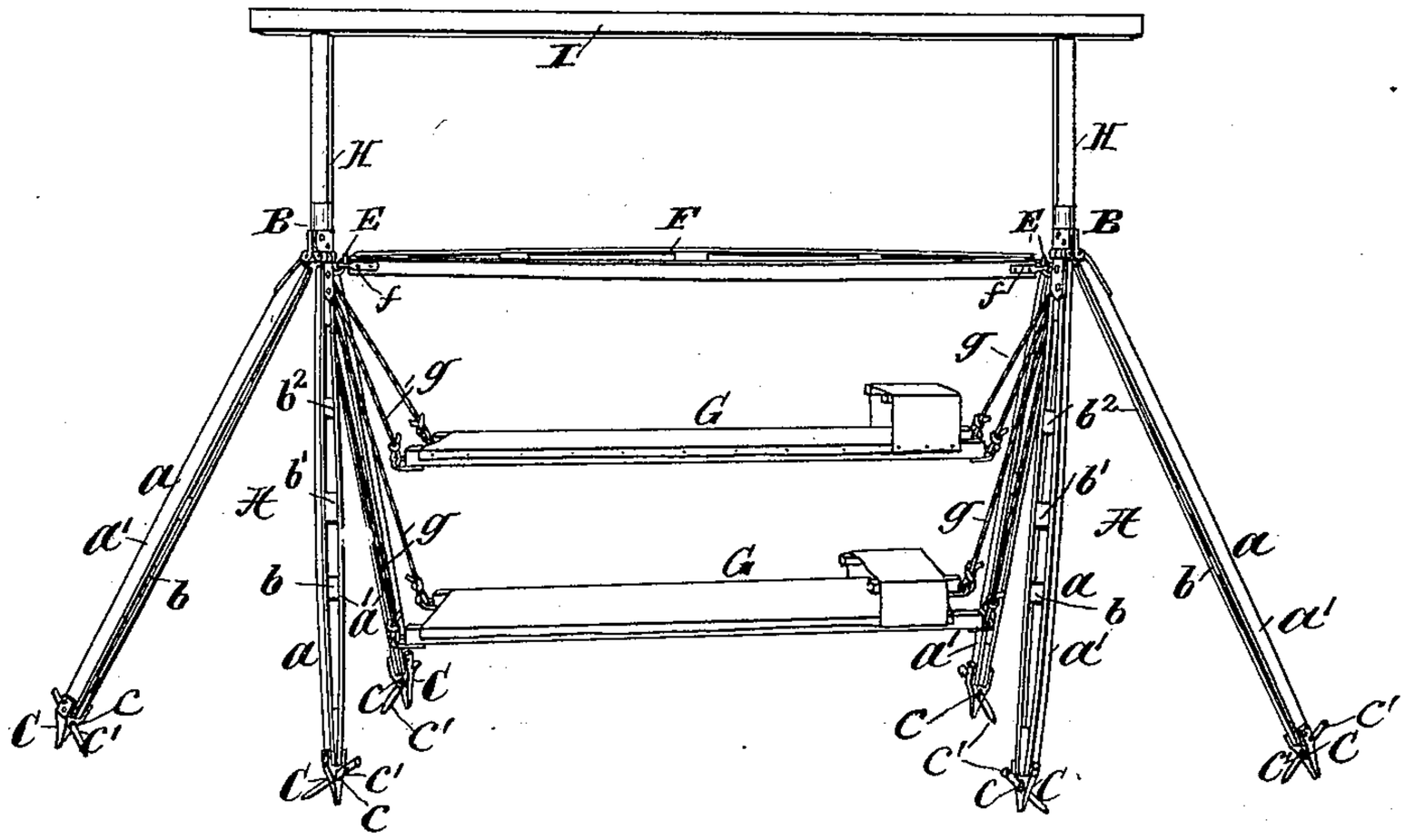


Fig. 2.

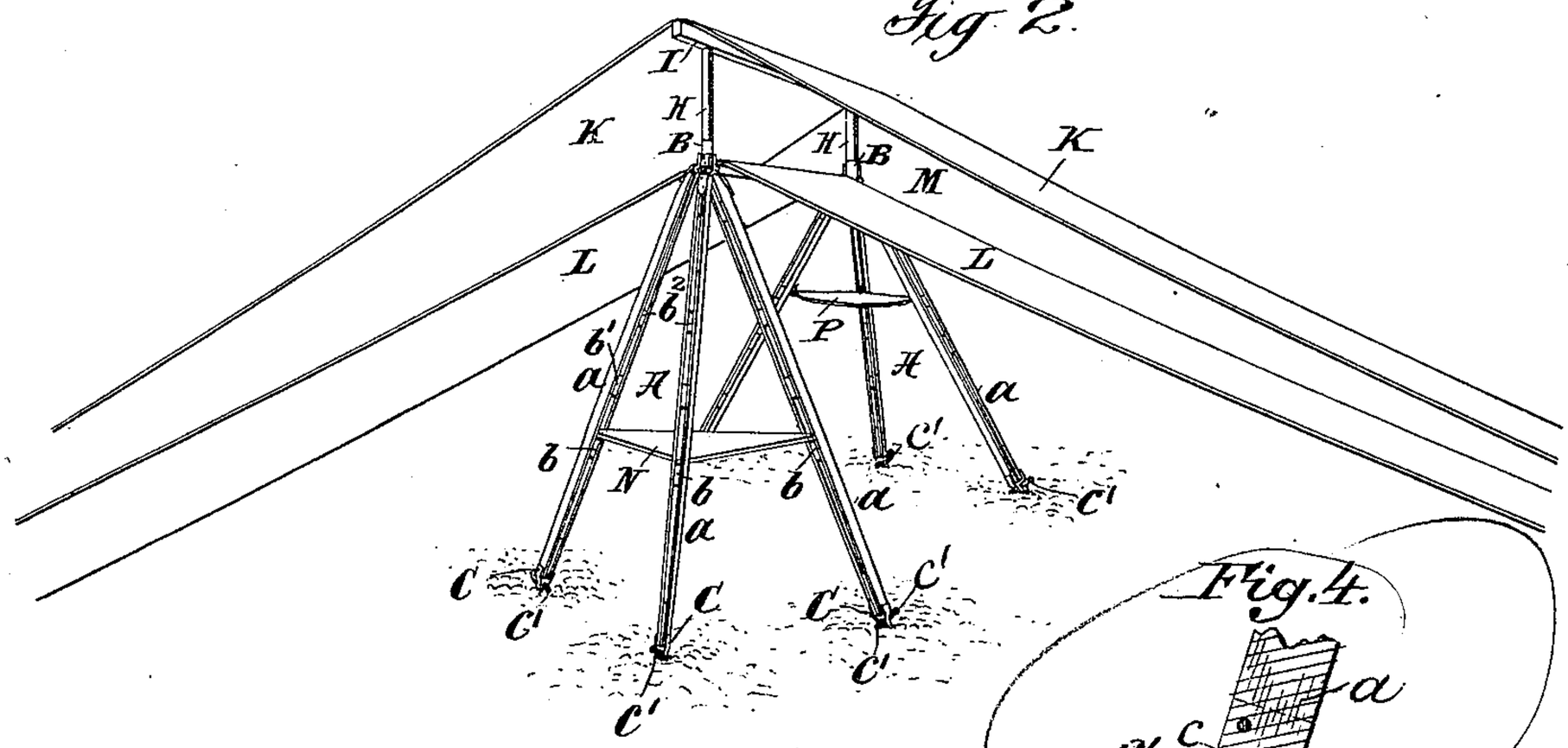
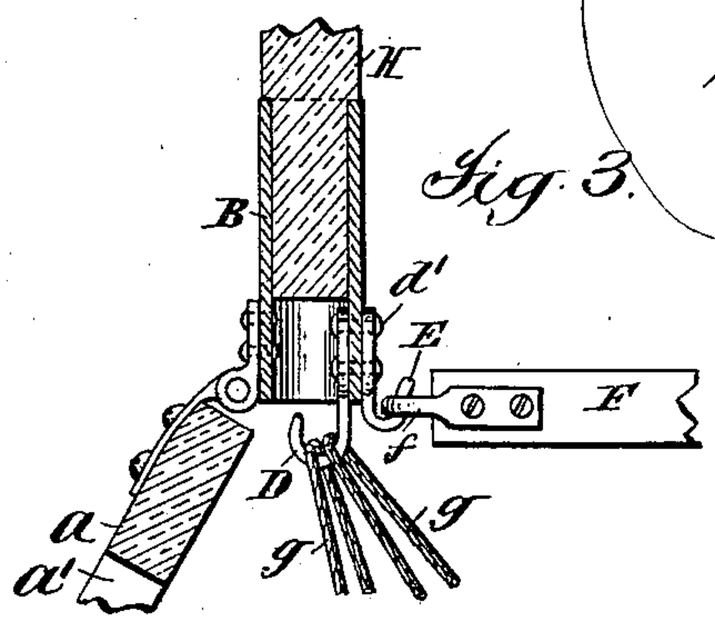


Fig. 4.

Fig. 3.



Attest:
T. F. Kehoe
A. V. Bourke.

Inventor
George W. Owens
By Philip Phelps Sawyer
Atty's

UNITED STATES PATENT OFFICE.

GEORGE W. OWENS, OF AUSTIN, MISSISSIPPI.

TENT.

SPECIFICATION forming part of Letters Patent No. 627,626, dated June 27, 1899.

Application filed July 12, 1898. Serial No. 685,746. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. OWENS, a citizen of the United States, residing at Austin, county of Tunica, and State of Mississippi; have invented certain new and useful Improvements in Tents, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to certain improvements in the frames or supports for tents.

The object of the invention is to produce a frame or set of supports for tents and similar structures which shall be light, and consequently readily portable, which shall at the same time be exceedingly rigid after erection, and which shall be adapted to be erected on hillsides or in very rough country or in similar locations where the pitching of ordinary tents is attended with serious difficulties.

A further object of the invention is to construct a frame or set of supports such as above referred to in such a manner that it may be used not only to support the tent, but also to sustain the weight of cots, hammocks, tables, shelves, and other similar conveniences not ordinarily found in tents, and to do this in such a manner that the increased weight of these devices when placed upon the frame or tent-supports shall act to increase the stiffness and rigidity of the structure and so increase the efficiency of the frame.

A further object of the invention is to construct a tent frame or support of the character heretofore adverted to in such a manner that one or more additional roofs or flies may be used therewith, thereby creating a dead-air space between the roofs, by which the structure is particularly adapted for use in hot climates.

With these and other objects in view the invention consists in certain parts, improvements, and combinations, which will be hereinafter described, and the novel features of which will be particularly pointed out in the claims hereunto appended.

In the accompanying drawings, which constitute a part of this specification, Figure 1 is a side view, slightly in perspective, of the tent-frame. Fig. 2 is an end view of the tent-frame slightly in perspective, showing the flies or roofs in position. Fig. 3 is a detail illustrating the support to which the legs of the standards are connected and illustrating also the manner of attaching the supporting-hook of the intermediate rigid brace. Fig. 4 is a detail illustrating the construction of the ends of the standards and the manner in which the pins which coöperate therewith secure the standards to the ground.

A indicates one of a pair of carrying standards or supports. There are two such carrying standards or supports, but as they are alike in all respects a description of one of them will serve for both. These standards or supports consist of three legs *a*, which are hinged, pivoted, or connected in any other suitable foldable manner to a common support B. Each of the legs *a* is preferably composed of pieces *a'*, which are separated by a series of blocks, three of which, as *b b' b²*, are shown. The number of these blocks may be varied according to the height of the standards. These pieces *a'* and blocks *b* make up a truss-like leg, which may be made very light, but which is exceedingly strong and stiff. One set of the blocks, as the blocks *b*, are located at a distance from the ends of the legs equal to the usual height of a table. Each of the legs is shod with an iron point C, having a perforation *c* therein. In erecting the tent the legs *a* are set up with the pieces *a'* suitably spread, the iron points being forced into the ground. Pins or pegs *c'* may be then driven through the perforations *c* into the ground, and the standard will thus be effectively fastened to the ground. Instead of perforations in the point a space might be left between the ends of the legs and the top of the point and the pins inserted therethrough. It is obvious that by reason of the fact that the legs of each of the standards are pivoted the standards can be set at an angle to each other and the ground and that they are adapted to be used on hillsides or in very rough country. Furthermore, the pins which pass through the standards into the ground act to efficiently brace and tie them to the ground, so as to make it extremely difficult and be practically impossible for the tent to be blown down or otherwise accidentally displaced.

The supports B, to which the legs of the standards A are hinged, are preferably hol-

low, as shown in the detail view. Certain sustaining devices, herein shown as hooks D, are connected to the supports B at their lower ends and preferably to the interior thereof. These hooks or supporting devices are preferably so arranged that any weight placed upon them will act downwardly in a vertical line from about the center of the support. Certain hooks E are also connected to the lower ends of the said supports, but preferably to the exterior thereof. The hooks D and E are preferably so arranged that the same set of securing bolts or rivets *d'* fastens them both to the support B. To the hooks E is connected a rigid cross brace or bar F, the said brace being preferably provided with loops or eyes *f*, which engage the hooks E. While this mode of connecting the brace to the standards is a cheap and efficient one, other modes may be employed. The standards A having been set up as described and the rigid brace F having been connected to the hooks, it is obvious that a firm and rigid structure is produced.

The purpose of the hooks D is to support cots G. A rope *g* is connected to the side bars of each of these cots and the rope is then thrown over the hook D. The weight of the cots and any weight that is placed upon them will act in a line which is nearly vertical from the center of the support B and will tend, therefore, to drive the standards farther into the ground and at the same time act to pull them toward each other. The rigid bar F will, however, act to prevent any approach of the standards to each other. The result is, therefore, that the greater the weight which is placed upon the standards the more firmly they will be set in the ground and the stiffer the entire supporting structure will become.

The supports B are, as has before been described, hollow, and their upper ends serve as sockets. In these sockets are inserted uprights H, which uprights are engaged by a cross-bar I. This cross-bar I serves to support the upper or main fly K of the tent. The cross-bar F, before referred to, serves to support the lower or second fly L of the tent, and between these two flies there is established a dead-air space M. The action of this dead-air space is of course well understood, and it can be readily seen that tents so constructed will be particularly adapted for use in hot climates. It is obvious that more than one dead-air space can be provided for by increasing the number of cross-bars I and the number of flies.

It has been before stated that the blocks *b* of the legs are placed at a distance from the ends of the legs equal to the height of an ordinary table. The purpose of so placing these blocks is to enable them to support a triangular table N, the corners of which enter the space between the pieces *a'* and engage these blocks. The other blocks *b' b²* of the series may be used in the same manner to support shelves, as P, or lines may be passed from block to block and supports thus formed, on which clothes and other articles may be hung.

I have shown herein two cots supported from the hooks D. It is obvious, however, that a greater number of cots might be supported therefrom. For instance, two cots might be supported side by side, so as to form sleeping accommodations for four people, without increasing the height of the standards. The cots can be readily removed in the daytime, and they can also be used as stretchers, if desired.

It will thus be seen that I have produced an exceedingly simple and effective frame for tents and one in which the weight of the additional devices used to increase the comfort of the persons living in the tent is so distributed as to increase the firmness and rigidity of the tent structure.

Modifications may be made in the structure without departing from the invention, and some of the features thereof are capable of independent use. I do not, therefore, desire to be limited to the precise details herein shown and described.

What I claim is—

1. In a frame for tents or similar structures, the combination with a pair of carrying-standards, each consisting of three legs pivoted to a common support and each support being provided with a carrying device located in the space between the legs, of an intermediate horizontal rigid brace located between the standards, said brace serving to connect the standards and also to prevent them from approaching each other, substantially as described.

2. In a tent, the combination with a tent fly or roof, of a pair of carrying-standards, each consisting of three legs, sharpened points on the legs, pins passed through openings therein into the ground, a common support to which the legs are pivoted and an intermediate rigid horizontal brace serving to connect the standards and prevent their approach to each other and also to support the tent roof or fly, substantially as described.

3. In a tent-frame, the combination with a pair of carrying-standards, each consisting of three legs of truss form, a common support to which said legs are hinged, the supports being provided with a carrying device located in the space between the legs and an intermediate horizontal rigid brace located between the standards serving to connect them and prevent their approach to each other, and a tent-roof supported by the brace, substantially as described.

4. In a frame for tents or similar structures, the combination of a pair of carrying-standards, each consisting of three legs of truss form, each of the legs being provided with sharpened points or bearings having openings for pins, a common support to which said legs are pivoted, and an intermediate horizontal rigid brace located between the standards and serving to connect them and prevent

their approach to each other, substantially as described.

5. In a frame for tents or similar structures, the combination of a pair of carrying-standards, each consisting of three legs and a common support to which the legs are pivoted, said support having an upwardly-extending part, a rigid brace connecting the standards and serving to support the tent-roof, and means sustained by the upwardly-extending parts for supporting a second roof, substantially as described.

6. In a frame for tents or similar structures, the combination of a pair of carrying-standards, each consisting of three legs of truss form, a hollow common support to which said legs are pivoted, the upper ends of which form sockets, uprights supported in said sockets, a bar connecting the said uprights, and an intermediate rigid brace between the standards, the said bar and said brace each serving to support a tent roof or fly whereby an intermediate dead-air space is formed, substantially as described.

7. In a frame for tents or similar structures, the combination of three legs of truss form, a common support to which said legs are pivoted, an intermediate rigid brace located between the standards and serving to connect them and prevent their approach to each other, and sustaining devices such as hooks connected to the supports, said sustaining devices serving to support cots or hammocks, substantially as described.

8. In a frame for tents or similar structures, the combination of a pair of carrying-standards, each consisting of three legs, a common hollow support to which the legs are pivoted, hooks connected to the outside of said hollow support, a rigid intermediate bar connected with the hooks, and hooks connected with the inside of said support, whereby weight placed upon the inside hooks will act downwardly in a vertical line and tend to increase the rigidity of the structure, substantially as described.

9. In a frame for tents or similar structures, the combination of a pair of standards, each consisting of three legs, a common hollow support to which the legs are pivoted, sustaining devices connected to the interior of said support, an intermediate rigid brace connecting the standards and serving to prevent their approach to each other, in combination with cots swung from the said sustaining devices whereby the weight of the cots and the persons upon them will act in a vertical line downward and serve to increase the rigidity of the structure, substantially as described.

10. In a frame for tents or other similar structures the combination of a pair of carrying-standards, each consisting of three legs, a common hollow support to which the legs are connected, hooks connected to the interior of said support, cots swung from the said hooks, an intermediate rigid cross-bar connecting the standards, uprights socketed in the standards, a bar connecting the uprights, and tent-flies passed over the bar and the intermediate brace, substantially as described.

11. A standard for tent-frames consisting of a hollow support, legs of truss form pivoted to said support, and a supporting device connected to the interior of said support at its lower end, substantially as described.

12. In a standard for tents and similar structures, the combination with a suitable support, of three legs pivoted thereto, each leg consisting of two side pieces and intermediate blocks, in combination with a triangular table, the angles of which enter the spaces between the side pieces and engage and are supported on the blocks, substantially as described.

13. In a standard for tents and similar structures, the combination with a support, of three legs pivoted thereto, each leg consisting of a pair of side pieces and a series of intermediate blocks, in combination with a triangular table, the angles of which enter the space between the strips and are supported upon certain of the blocks, the other blocks of the series serving to support shelves, substantially as described.

14. In a frame for tents or similar structures, the combination of a pair of standards, each standard consisting of three legs pivoted to a hollow support, table-supports carried by the legs, a table carried by the supports, a rigid brace connecting the standards, uprights carried by the supports of the standards, a cross-bar connecting the supports, and two tent-flies, one passing over the connecting-bar and the other passing over the brace, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE W. OWENS.

Witnesses:
JAMES Q. RICE,
T. F. KEHOE.