

(No Model.)

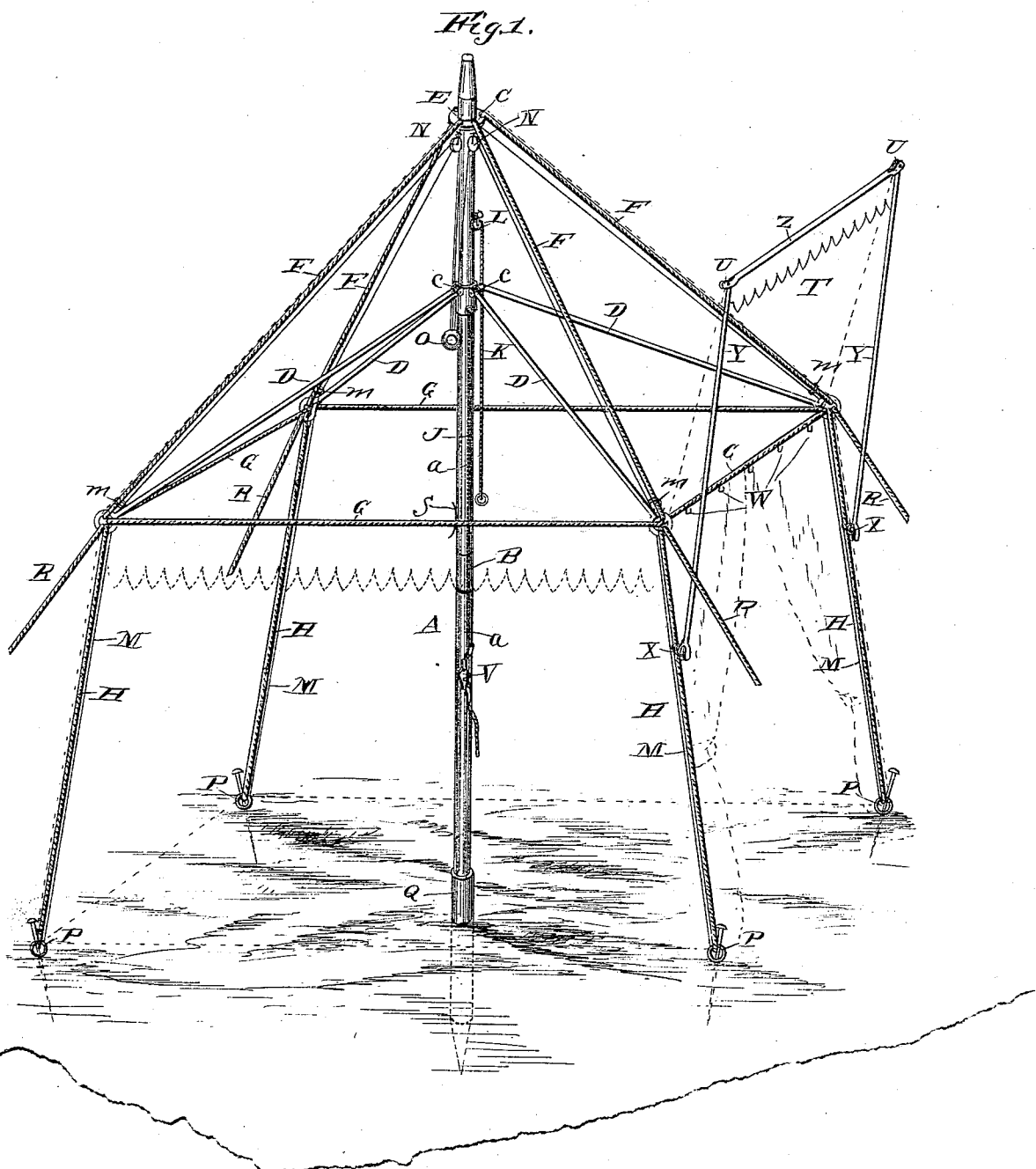
3 Sheets—Sheet 1.

C. GRAY.

FOLDING PORTABLE TENT.

No. 361,505.

Patented Apr. 19, 1887.



Witnesses

Chas. L. Taylor
J. W. Gamm

Inventor

Clinton Gray

By his Attorneys

C. A. Snowden

(No Model.)

3 Sheets—Sheet 2.

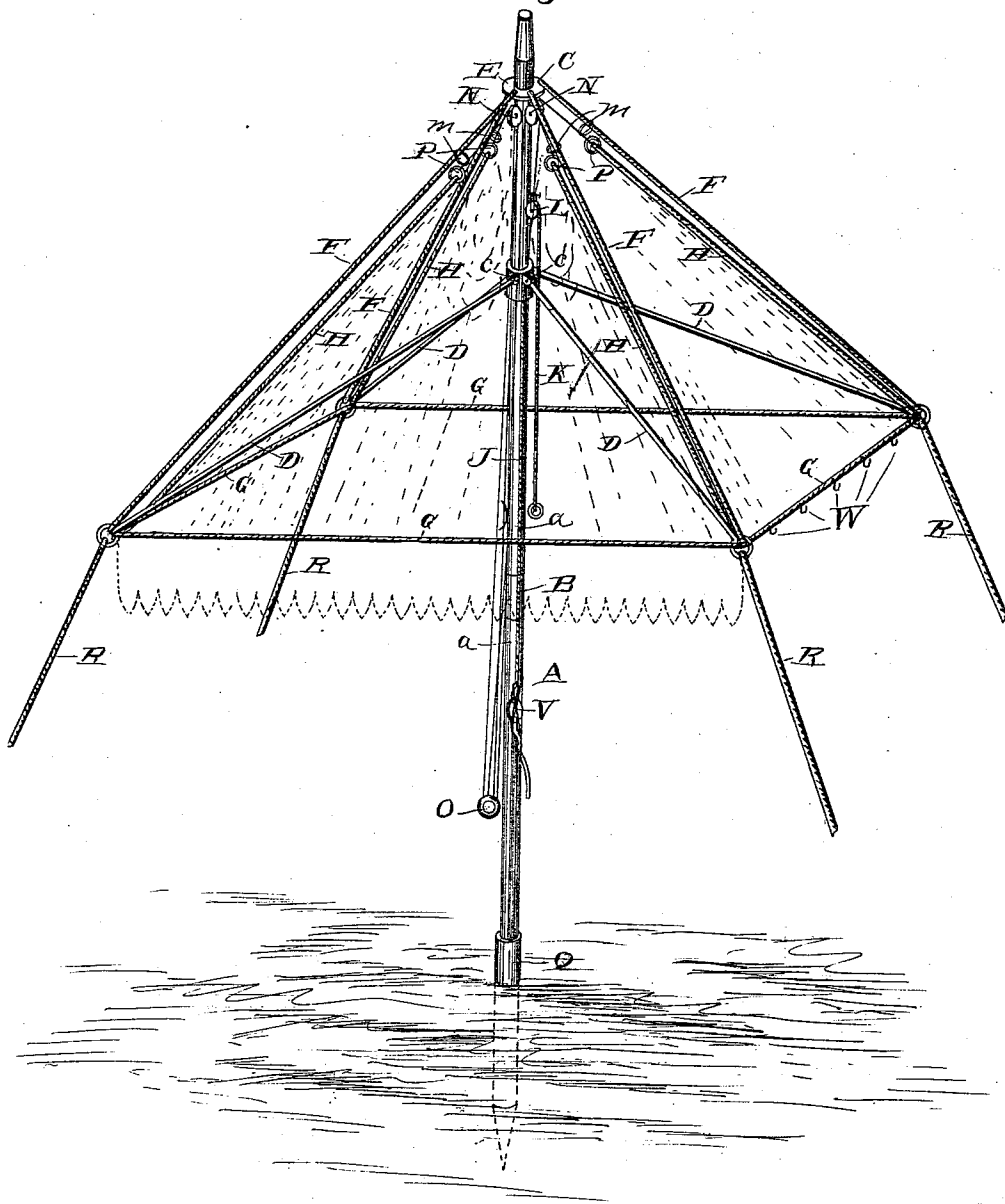
C. GRAY.

FOLDING PORTABLE TENT.

No. 361,505.

Patented Apr. 19, 1887.

Fig. 2.



Witnesses

Chas. L. Taylor

J. W. Garner

Inventor

Clinton Gray

By his Attorneys

C. A. Howells

(No Model.)

3 Sheets—Sheet 3.

C. GRAY.

FOLDING PORTABLE TENT.

No. 361,505.

Patented Apr. 19, 1887.

Fig. 3.

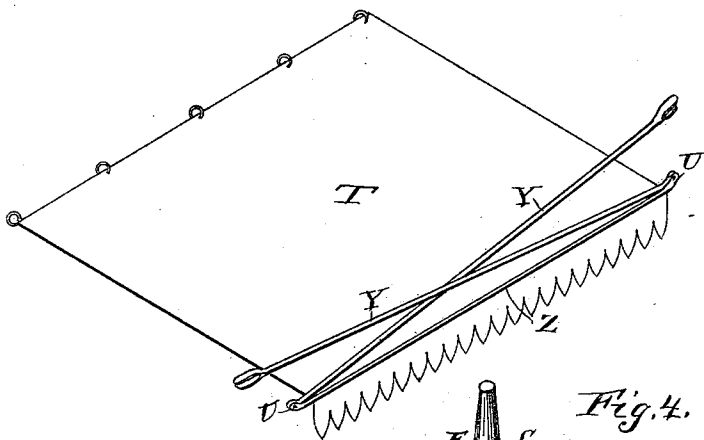
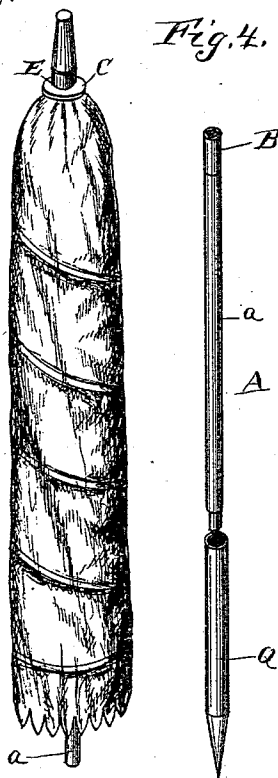


Fig. 4.



Witnesses

Chas. L. Taylor,
Geo. G. Gammie.

Inventor

Clinton Gray

By *his* Attorneys

C. A. Shaw & Co.

UNITED STATES PATENT OFFICE.

CLINTON GRAY, OF ELMIRA, ASSIGNOR OF ONE-THIRD TO GEORGE J. SHULTS, OF AVOCA, NEW YORK.

FOLDING PORTABLE TENT.

SPECIFICATION forming part of Letters Patent No. 361,505, dated April 19, 1887.

Application filed August 10, 1886. Serial No. 310,549. (No model.)

To all whom it may concern:

Be it known that I, CLINTON GRAY, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented a new and useful Improvement in Folding Portable Tents, of which the following is a specification.

My invention relates to an improvement in folding portable tents, adapted to be readily pitched or struck and to be folded into a small space, and which shall be simple, cheap, and durable. These objects I attain by the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a tent embodying my improvements, when pitched or set up, the canvas covering of the tent being omitted in order to disclose the interior frame-work. Fig. 2 is a similar view of the same when partially erected; Fig. 3, a detail perspective view of the awning and its frame. Fig. 4 is an elevation of the tent when folded ready for transportation.

A represents the center pole of the tent, which is composed of two or more sections, *a*, which are adapted to be jointed together, and for this purpose are provided with tubular sockets B. The lower end of the lower section of the center pole is inserted in a metallic socket, Q, which has its lower end pointed, so as to be readily driven into the ground.

C represents a collar, which is placed on the upper section of the pole and is adapted to slide thereon. This collar is provided with a number of radial ears, *c*, to which are pivoted the inner ends of a number of radial brace-rods, D.

L represents a pulley, which is attached to the upper section of the pole, above the sliding collar, and K represents a cord or rope, which is passed over said pulley and has one end attached to the sliding collar, the other end of the said cord or rope being provided with a ring or weight forming a handle. To the lower side of the sliding collar is attached a cord or rope, J, and the lower end of the said cord or rope is secured on a cleat, V, which is attached to the center pole. To the upper end of the pole is attached a metallic

flange, E, to which is attached a number of pulleys, N.

F represents a series of ropes or cords, which have their upper ends attached to the flange E and their lower ends attached to the outer and lower ends of the braces D.

G represents ropes, which connect the outer ends of the said braces, the said ropes G being arranged horizontally, as shown in Fig. 1. The canvas to form the roof or cover of the tent is stretched over the ropes F.

H represents the corner ropes of the tent, which are fastened at their upper ends to the outer and lower ends of the brace-rods D, and are provided at their lower ends with rings P, through which suitable stakes or spikes are driven into the ground, in order to support the center pole in a vertical position when the tent is pitched.

M represents a series of small ropes or cords, which have their lower ends fastened to the rings P or to the ropes H. The said cords or ropes M are then passed through rings *m*, that are free to slide upon the ropes F, and from thence are passed through the pulleys N, and have their lower pendent ends connected by a weighted ring, O, which hangs loosely in the top of the tent when the latter is pitched. In case of large tents, where coarse rope is used, the rings *m* are drawn down by a small cord attached to said rings, thence to bottom end of ropes M. The rings *m*, by their own gravity, descend to the lower ends of the ropes F when the tent is pitched, and the function of the said rings is to hold the small ropes M close up in the corners of the tent, so that they will not hang in the way.

S represents a cleat, which is attached to the pole at a suitable distance above the cleat V. Guy-ropes R have their upper ends attached to the outer ends of the ropes F, and the lower outer ends of the said guy-ropes are attached to stakes driven in the ground beyond the corners of the tent. These guy-ropes serve to brace and support the tent and prevent it from being overturned by the wind.

T represents an awning-frame, comprising a cross-bar, Z, and rods or braces Y, which are pivoted at their upper ends to the ends of the bar Z, as at U. This construction admits of

the awning-frame being folded into a very small compass, as shown at Fig. 3. The canvas forming the awning is provided at its inner edges, where it is attached to the tent, with a series of small hooks, W, adapted to engage eyes that are made in the sides of the tent. The lower ends of the rods Y are reduced and thus provided with shoulders, and are slipped into rings X, which are fastened to the ropes H, thus supporting the awning-frame in the position shown in Fig. 1. A series of the rings X are provided with the tent, so that the awning may be supported at any desired height.

The operation of my invention is as follows: In order to pitch or set up the tent, the socket Q is first driven into the ground and the sections of the center pole are jointed together, and the lower end of the center pole is inserted in the socket Q. The rope J is now drawn downwardly, causing the sliding collar C to be lowered upon the upper section of the pole, which causes the braces D to spread out, so as to stretch the frame formed by the ropes F and G for the upper portion of the tent. This causes the canvas to be stretched over the said frame, and the rope J is then fastened to the cleat V. The ring O is released from the cleat S, thus causing the corner ropes, H, to drop, and they are then stretched and spread until the canvas sides of the tent assume the correct position, when stakes or pins are driven through the rings P at the lower ends of the ropes H to secure the said ropes to the ground. The guy-ropes are then stretched and secured, and the awning is attached to the front side of the tent, as before described.

In order to strike or fold the tent, the stakes are removed from the rings P, so as to release the lower ends of the ropes H, and the ring O is then drawn downwardly, thereby causing the ropes M to draw the lower ends of the ropes H and the sides of the tent up under the top of the tent, as indicated in Fig. 2. The ropes M are then attached to the cleat S. The rope J is now loosened from the cleat V and the rope K is pulled upon, causing the collar C to rise on the center pole, so as to fold the braces D in upon the latter, thereby forming a compact bundle, as shown in Fig. 4, which is secured by means of ropes or cords.

From the foregoing description it will be readily understood that the operations of pitching and striking the tent are very simple, and that the tent when set up is very strong and durable, and when folded is extremely compact and easily transported.

Having thus described my invention, I claim—

1. The combination of the center pole, the sliding collar thereon, the brace-rods D, pivoted to the said collar, ropes, such as J or K, for raising and lowering the collar on the center pole, the ropes F, connecting the upper end of the center pole with the outer ends of the brace-rods, and the ropes G, connecting the

outer ends of the brace-rods, substantially as described.

2. The combination, in a tent, of the center pole, the folding frame for the upper portion of the tent, the ropes H, depending from the corners of the said frame, the pulleys N at the top of the center pole, and the ropes M, attached to the lower ends of the ropes H and passed over the said pulleys and depending therefrom and connected together for simultaneous operation, substantially as described.

3. In a tent, the combination, with the center support, of the upper frame having the inclined corner ropes F, the braces attached to the outer ends of the said ropes and bearing against the center support, the rings m, sliding thereon, the corner ropes H, depending from the corners of the frame, and the ropes M, attached to the lower ends of the ropes H, passed through the rings m, and over pulleys at the upper side of the tent, for the purpose set forth, substantially as described.

4. The combination of the tent having the ropes H at its corners and the rings X attached to the said corner ropes, with the awning-frame comprising the side rods, Y, and the end rod, Z, pivoted together, the said rods Y having their lower ends stepped in the rings X, and the awning covering connecting the rods Y Z to the tent, substantially as described.

5. In combination with the tent having the hooks W, the awning-frame comprising rods Y Z, pivoted together, the rods V, pivoted to the tent, and the awning connecting the rods to the hooks W, as set forth.

6. In combination with the tent having the rings X on one side, the awning-frame having its side bars or rods adapted to enter the rings X, the hooks W on the tent above the rings X, and the awning-covering carried by the frame and held to the tent by the hooks W, as set forth.

7. In a tent, the center pole, the sliding collar C thereon, the brace-rods D, pivoted to the collar, ropes F, connected to the center pole above the collar and to the outer ends of the brace-rods D, corner ropes H, connected to the ends of rods D, ropes for raising and lowering the collar C, and ropes M, connected to the ropes H, as set forth.

8. The combination of the center pole, the sliding collar C thereon, the brace-rods pivoted to the said collar, the ropes F, connecting the outer ends of the brace-rods with the upper end of the pole, and the corner ropes H, depending from and attached to the outer ends of the brace-rods, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CLINTON GRAY.

Witnesses:

HERBERT W. FUDGE,
BRADLEY W. GRAY.