W. W. WHITCOMB.

Tent Frames.

No. 138,774. Patented May 13, 1873.

Fig. 1.

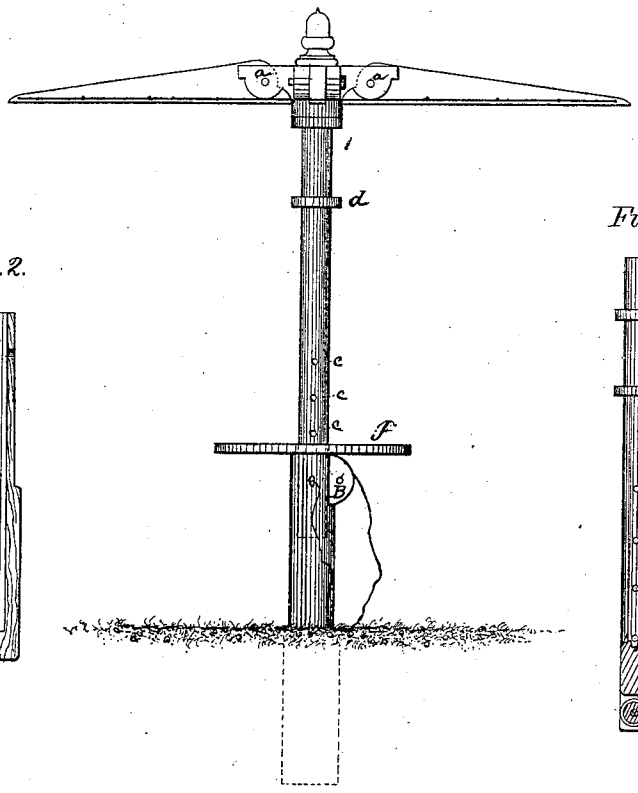


Fig. 2.

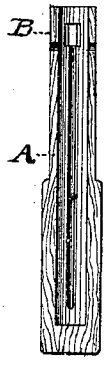


Fig. 3.

Fig. 4.

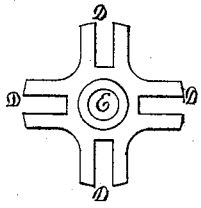


Fig. 5.

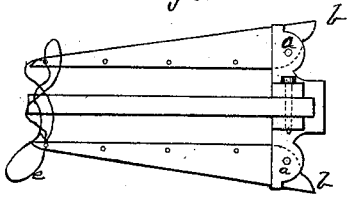
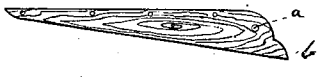


Fig. 6.



Witnesses
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UNITED STATES PATENT OFFICE

WILLIAM W. WHITCOMB, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN TENT-FRAMES.

Specification forming part of Letters Patent No. **138,774**, dated May 13, 1873; application filed January 3, 1873.

To all whom it may concern:

Be it known that I, WILLIAM W. WHITCOMB, of Boston, in the Commonwealth of Massachusetts, have invented a new and useful Tent-Frame, of which the following is a specification:

My invention relates to that class of tents in which the main support is a center standard or pole sunk in the ground, from which radiate arms for the support of the covering. It consists in certain improvements in the structure of the center-pole and of the head-block, into which the radiating arms are stepped or hinged, and in a combination of devices, by means of which the whole frame of the tent may be taken apart, and folded, and packed away compactly and without inconvenience. The first part relates to the structure of the center-pole in two sections. The lower, being hollow to near the bottom, receives within it the upper, (as one section of a telescope is slided within another,) which, when the arms and covering are arranged, can be raised and sustained at the desired height. The devices for raising and lowering this upper section are simply pulley or friction-wheels and a cord. The second part of my invention relates to the structure of the head-block near or at the top of the upper section. This is fixed upon the upper section, and consists of a strong block, best made of iron, having a number of pairs of strong projecting ears in the recesses, between which the radiating arms are stepped and hinged in such a manner as to permit their being folded back or upward, like an umbrella reversed.

Description of the Drawing.

Figure 1 represents the tent-frame set up and ready for the covering. Fig. 2 represents a section of the lower part of the center-pole divided by a line drawn through the center lengthwise, showing the hollow or tubular portion. Fig. 3 represents the upper section of the center-pole with a friction-wheel at the bottom. Fig. 4 represents the head-block with the ears for supporting the arms. Fig. 5 represents the arms in the head-block and folded backward, as when stowed away. Fig. 6 represents one of the arms.

A is a groove in the sides of the hollow part of the lower section of the center-pole large enough to receive the hoisting-cord and prevent the friction of contact in raising and lowering the upper section. In this part of the pole there is another like groove opposite the groove A. These grooves extend from the bottom of the tube upward as far as it is proposed to raise the upper section. As they are for the purpose of receiving the hoisting-cord, and preventing its interfering with the sliding of the upper into the lower section of the center-pole, they may be made as well in the upper section. I have so made them in the model. B is a pulley-wheel fixed at the upper end of the groove, on one side of the tube and in the same plane with the grooves, of such dimensions as to extend through the wall and clear the outside of the pole. The periphery of this wheel is grooved suitably to hold the hoisting-cord. Opposite this wheel, and in the groove on the opposite side of the tube, the hoisting-cord is made fast. C is a grooved friction-wheel like B, fixed in the lower end of the upper section of the center-pole, and having its axis at right angles thereto. D D D D are pairs of ears in the head-block, between which each arm is hinged. E is the center hole in the head-block, through which the upper end of the center-pole is passed. The head-block may be fixed, by a pin or otherwise, at any point on the center-pole. *a* is the hole in the arm, Fig. 6, through which the axis is passed upon which the arm turns or swings between the ears. *b* is a prolongation of the lower edge of the arm at the hinge, of a shape and size to serve, by striking against the center-pole or a block on the same, as a brake to prevent the descent of the arm below the desired point. F is a disk, resting upon the top of the lower section of the center-pole, and through which the upper section passes. It serves for a table, or may be dispensed with. *c c c* are holes in the upper section to receive the holding-pin. *d* is a projection on the upper section of the center-pole to prevent it from entering too far into the socket. *e* is a cord employed to stay the arms by passing from the end of one to another.

General Description.

At a point in the lower section of the center-pole about opposite the wheel B make fast one end of a cord, suitable in size and strength, to hoist the upper section of the center-pole. In fastening, take care that it does not project so as to interfere with the sliding of one section within the other. Pass the other end of the cord over the pulley B. Set the lower section of the center-pole in the earth to such a depth as will be sufficient for its firmness. Place the upper section of the center-pole in the socket or hollow of the lower, taking care to place the friction-wheel C so that the groove therein shall be astride the cord. As the upper section passes down into the socket of the lower section the cord passes over the said wheels B and C, and is by them guided into the grooves A A, where it is held by the close fit of the said upper section of the socket. To raise the said upper section draw upon the cord, and, when at the proper height, make fast by a pin or other device. Care should be taken to leave sufficient length of the upper within the socket of the lower section for strength and stiffness. When the upper section has been inserted into the lower down to the bottom the head-block with the arms can easily be placed on the upper section, and then the whole covered with the cloth, and all will be ready for raising.

The dimensions I prefer are as follows: The lower section, five feet long, having a hollow or socket four and one-half feet deep, and inserted two feet in the ground. The upper section I make six feet long, and, when raised, make one and one-half foot in the socket. This will make the pole, when raised, from the top to the ground seven and one-half feet. I propose to stay this against the wind by stays passing from the ends of the arms to the ground, if needed.

The same frame may be used as a clothes-drier by passing lines from one arm to another.

The head-block and arms may be made together, the arms not being hinged, but I prefer them as above described.

Claims.

I claim, and desire to secure by Letters Patent—

1. A center-pole for a tent or other like purpose, having two or more sections sliding one into the other, in combination with a movable head-block, in which radiating arms may be fixed or hinged.

2. In a center-pole for a tent or other like purpose, in two sections, sliding one into the other, the pulley-wheels B and C, and the grooves A, and the grooves opposite, whether said grooves are in the upper or lower section of said pole.

3. A frame for a tent or other like purpose, consisting of a center-pole, in two or more sections, sliding one into another, and capable of being raised or lowered and fixed at any point of height, and a movable head-block having hinged radiating arms.

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