C. P. HOWE.

COMBINED MOSQUITO BAR FRAME AND CANOPY.

No. 252,769. Patented Jan. 24, 1882.

Fig. 1.

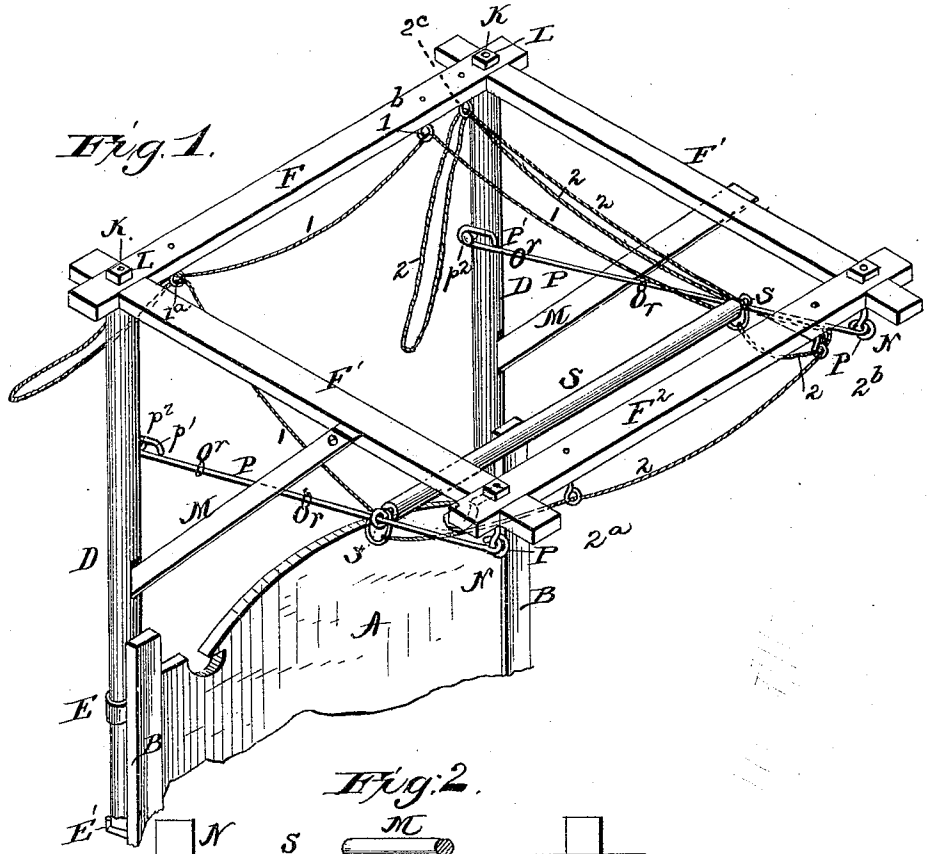
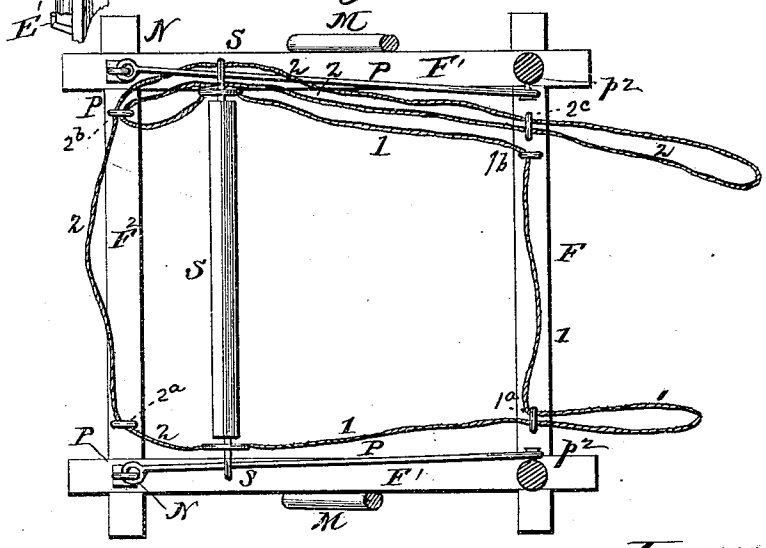


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES P. HOWE, OF GALVESTON, TEXAS.

COMBINED MOSQUITO-BAR FRAME AND CANOPY.

SPECIFICATION forming part of Letters Patent No. 252,769, dated January 24, 1882.

Application filed July 9, 1879.

To all whom it may concern:

Be it known that I, CHARLES P. HOWE, of the city of Galveston, in the county of Galveston and State of Texas, have invented a new and useful Mosquito-Bar Frame and Canopy Combined, of which the following is a specification.

This invention relates to portable frames and supports for mosquito-bars that are provided with suitable means for expanding and contracting the canopy.

The object of my invention is to provide a simple and substantial construction of frame for supporting the mosquito-bar that will admit of ready application to and removal from the bedstead, and also to provide a simple and effective arrangement of cords to the mosquito-bar, whereby it may be easily extended over the bed or folded out of the way by the occupant of the bed, as will hereinafter more fully appear.

In the accompanying drawings, Figure 1 is a perspective view of a mosquito-bar frame constructed according to my invention and applied to the head-board and posts of a bed; and Fig. 2, a plan view of the frame inverted, showing the arrangement of cords for expanding and folding the canopy.

The canopy-frame may be applied to any bedstead of ordinary construction. For the sake of illustration, a part of the head-board A and posts B of a bed only is shown.

To each of the posts B may be secured the uprights D in any suitable manner. In this instance the uprights are passed through loops E, secured to the posts, and are stepped upon bolts E′, driven into the posts, that engage in slots in the lower ends of the said uprights, by which means the uprights may be readily applied to and removed from the bedstead.

The mosquito-bar frame F is of rectangular shape, and is made of four pieces joined at their ends by threaded bolts K, screwed into the upper ends of the uprights D, that pass through the meeting ends of the back piece, F, and side pieces, F′, of the frame, and by means of nuts L clamp the said pieces together, and also serve to partially support the rear end of the frame.

To render the support more permanent, without preventing the frame-pieces from being readily folded together when taken down, the frame is provided with brace-arms M, hinged to its side pieces, F′ F′, that engage at their free ends with notches in the supports D, and when not in use may be folded parallel with the side pieces of the frame. The said side pieces are united to the front piece, F^2, of the frame by eyebolts N, that pass through their meeting ends, and not only serve to hold the frame-pieces together, but afford simple means for connecting the frame with eyes *p* upon the ends of guide-rods P, to which the canopy or netting may be connected. The rods P are provided with similar loops, *p′*, at their rear ends, that are passed over pins p^2 in the uprights D.

The upper edges of the netting that forms the canopy are secured to rings *r r*, that slide upon the bars P P, and is at its front edge secured to a rod, S, that extends across the frame, and is attached to the bars P by eyebolts *s*, by which means it may slide backward and forward upon the guide-bars beneath the frame, and carry with it the entire netting forming the canopy, to either expand or fold it. This operation is performed by a novel arrangement of cords, whereby the occupant of the bed may be enabled to move the canopy in either direction while lying in bed, and in the following manner: The cord 1 is attached at its ends to the ends of the rod S, and passed back upon opposite sides of the frame, one end passing through the metal loop 1^a only, and the other end passing through the loop 1^b, and thence across the rear bar of the frame to and through the loop 1^a. As the cord 1 from both sides of the frame passes through loop 1^a, by pulling upon its doubled end the bar S may be pulled back from a position near the head of the bed. The cord 2 is attached at both of its ends to the ends of the rod S, one end passing through the loop 2^a upon the front cross-bar of the frame, and crosses to the other end of the bar and passes through the loop 2^b, from thence to the rear of the frame and through a loop, 2^c. The other end of the cord is attached to the nearest end of the bar S, and passes through the loop 2^b, thence back to the rear of the frame along with the other end of the cord, just described, and then through the loop 2^c on the rear cross-bar of the canopy-frame, so that by pulling the doubled

ends of cord 2 the bar S may be drawn from the back to the front of the frame.

The method of folding and expanding the canopy-netting by the above-described means will be readily understood, although I will give a brief explanation of the same.

By pulling on the connected ends of the cords 2 at the head of the bedstead the bar S will be moved along the brace-rods P to the foot end of the canopy-frame, carrying with it the mosquito-net, and allowing the same to be drawn over the foot and sides of the bed. By drawing on the cords 1 where they are connected together below the eye 1^a at the head of the bed, the bar S can be moved back to the posts D, and the mosquito-net thrown over the headboard out of the way.

It will be seen that the canopy is composed of four bars rigidly united at their angles, and that this frame is rigidly bolted to the ends of the posts D. It will also be seen that the props or braces P for said frame serve as guides and supports for the bar S in addition to the stays M. The cords by which the net is spread out over the bed and drawn up out of the way thereof are so arranged that there is no liability of their becoming entangled or deranged, and the connected ends of each one of these pull-cords are so located at the head of the bedstead that a person lying thereon can operate them conveniently. By removing the fastenings at the angles of the canopy-frame this frame can be removed from the two posts D D and compactly folded up.

I claim as new—

The combination, with the rectangular detachable canopy-frame, of bolts K, rigidly securing it to the posts D D, the folding brace-arms M, the inclined guide-rods P, connected to posts D and also to eyebolts at the outer ends of the canopy-frame, the bar S, adapted to slide on the said inclined rods P, and cords 1 and 2, arranged in the manner and for the purposes described.

Witness my hand and seal, at the city of Galveston, this 13th day of May, A. D. 1879.

CHARLES P. HOWE. [L. S.]

Witnesses:

G. A. MEYER,

FRANK FABY.