## A. L. EDWARDS.

MOSQUITO BARS.

No. 181,157.

Fig. 1. Patented Aug. 15, 1876.

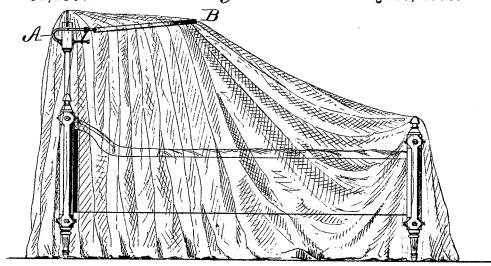
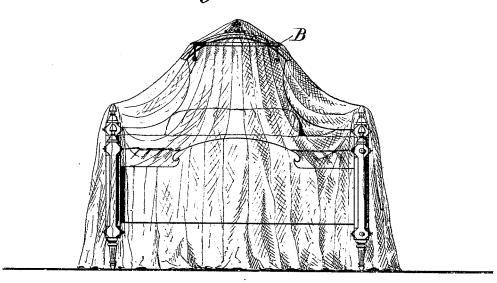


Fig. 2.



WITNESSES:

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INVENTOR:

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No. 181,157. Patented Aug. 15, 1876. Fig. 3. \_A\_ Fig. 10. Fig.5. *j*-0 Fig.8. Fig. 7. Fig. 4. Fig. 6.  $\mathcal{B}$  $\boldsymbol{e}$  $\mathcal{B}$ WITNESSES: M. M. Dodge, Jarvin Base INVENTOR: A. L. Codwards.
By Dodge & Sons
His atty.

# UNITED STATES PATENT OFFICE.

ALFRED L. EDWARDS, OF NEW YORK, N. Y.

#### IMPROVEMENT IN MOSQUITO-BARS.

Specification forming part of Letters Patent No. 181,157, dated August 15, 1876; application filed January 3, 1876.

To all whom it may concern:

Be it known that I, ALFRED L. EDWARDS, of New York, in the county of New York and State of New York, have invented certain Improvements in Mosquito-Bars, of which the follow-

ing is a specification:

The object of my invention is to provide a portable mosquito and fly bar, which may be carried in a trunk or satchel, and quickly applied to any bed. The invention consists of a flexible or elastic metal band to support the netting, and of two clamps, which are attached to the ends of the band, and secured to the bed by thumb-screws, as hereinafter more fully

explained.

Figure 1 is a side elevation of a bedstead with my bar applied thereto; Fig. 2, an end elevation of the same, looking from the lower end or foot; Fig. 3, a side view of one of the clamps; Fig. 4, an end view of the same; Fig. 5, a side view of one end of the metal band; Figs. 6 and 7, respectively, side and top views, showing the manner in which the ends of the band are connected to the clamps; Fig. 8, views of the extra plate or clip used with certain beds; Fig. 9, a view, showing the manner in which the clips are used, and Fig. 10 a perspective view, showing the contrivance packed in its box, as for storage or transportation.

My contrivance consists, essentially, of three parts, viz: two clamps or brackets, A, which may be readily attached to the head of any bedstead, and a long elastic metal strip or band, B, which may be attached at its ends to the brackets, so as to extend out over the bed, and sustain the canopy or netting, as shown in Figs. 1 and 2, or coiled up in a small space, so as to be packed, together with the brackets, in a small box or case, as shown in Fig. 10. Each clamp or bracket consists of a bar, a, having one end, b, curved, so as to extend over, and bear against, the outside of the head-board, as shown in Figs. 1, 2, and 3. The sliding arm c is made with a socket, through which the bar a passes, and the parts are so arranged that, although the arm will slide readily forward on the bar, it will lock fast thereon whenever there is any backward pressure against its lower end. This arrangement allows the clamps to be applied very quickly

to a head-board of any thickness, as it is only necessary to place the clamp thereon, push the arm forward until the screw bears, and then give the screw a slight turn. To remove the clamp, it is only necessary to give the screw a slight backward turn, and then take hold of the arm near the bar, and slide it back thereon.

In order to prevent the clamps from bruising the bed, the curved ends and the ends of the screws are covered with leather or other suitable soft material. Instead, however, of using the covering the ends of the bar and screw may be recessed, and have rubber pads inserted therein. The inner or forward end of each clamp is provided with a thumb-screw, e, and with a hole, f, both passing transversely through the bar, as shown. There is also appended to the clamp, by a cord or chain, a small pin, g, of the proper size to fit the hole f.

The metal band or strip B is made of a width of an inch or more, and of any suitable length, from four feet upward. Each of its ends is provided with a notch or slit, *i*, and with two

small holes, j, as shown in Fig. 5.

In using the contrivance the clamps are attached to the head-board of the bed at any suitable distance apart, the slotted end of the band placed astride of the thumb-screws e of the respective clamps, and fastened thereby, and then the pins g inserted through the holes f in the brackets, and one of the holes j in the band.

The netting may be arranged to cover the whole bed, and extend over the foot-board; or it may be made to cover only the upper portion of the bed, over the head of the occupant or occupants thereof, as preferred. The netting may be attached permanently to the band; but it is preferred to have it detachable therefrom, in order that it may be rolled or folded into a small compass. When desired, the netting may be turned up on the metal band out of the way, but where it can be reached and pulled down in an instant.

When the bed is to be made up the pins g are withdrawn, and the band turned up in an upright position against the wall, and the netting folded up out of the way. When the net is in use the band may be given more or less inclination or elevation by changing the pins

g from one to the other of the holes j. When the netting is no longer required for use, and is to be removed from the bed, the netting is removed, the ends of the band or strip disconnected from the clamps, and the clamps detached from the bed. The band may then be coiled up and packed with the clamps and netting in a very small space.

In order that the band and clamps may be packed and carried conveniently I provide a flat circular box, E, and, coiling the band therein, place the clamps in the center, as shown in Fig. 10. By the use of the box I pack the device in a very compact and convenient form, so that it may be carried in a valise, trunk,

or satchel without any trouble.

It may sometimes be necessary to apply my bar to beds having curved heads, which will not allow the arms of the clamps to stand in the required horizontal position. In such case I employ at each end of the band or frame B a small plate or clip, F, which is pivoted to the end of the arm a by the pin g, and hooks under the band B, as shown in Fig. 9, so as to hold the band in the required position.

It is obvious that the ends of the band or strip B may be connected to the brackets in any suitable manner. The band may be made

of any suitable metal, and of any required size. Being, however, arranged to receive the strain edgewise it may, under all circumstances, be made very light. The clamps and band may be ornamented in any suitable manner, and, to prevent rusting, they may be plated or otherwise coated.

Having thus described my invention, what

I claim is—

1. In combination with the clamps A, the elastic or flexible band B, substantially as described.

2. The band B, having its ends slotted, and the hole j, and secured to the arm a of the brackets by means of the screwe and pin g, substantially as shown and described.

3. The band B, provided with a series of holes, j, by which it can be adjusted, in combination with the bracket A, substantially as and for the purpose set forth.

4. The clip B, in combination with the bracket A and band F, all constructed and arranged to operate as set forth.

#### ALFRED L. EDWARDS.

Witnesses:

ALFRED EDWARDS. LEWIS EDWARDS.

