

R. F. S. HEATH.

Improvement in Mosquito-Bars.

No. 114,556.

Patented May 9, 1874.

Fig. 2.

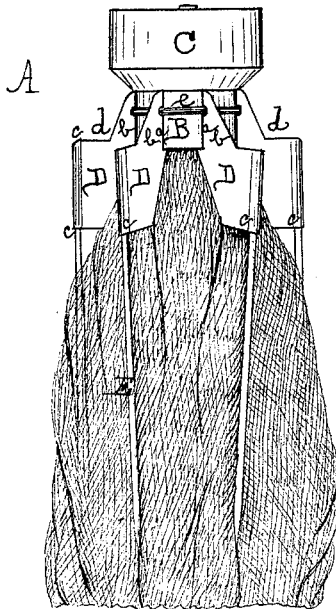


Fig. 1.

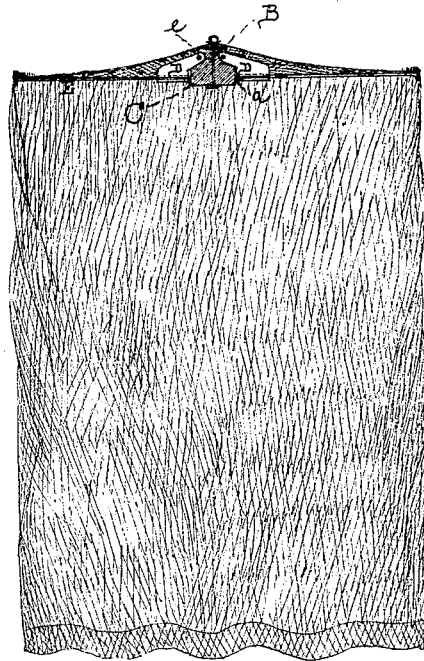


Fig. 4.

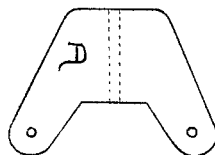


Fig. 3.

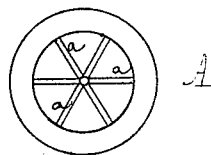
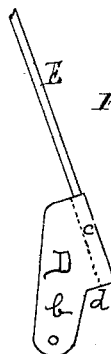


Fig. 5.



WITNESSES:

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# United States Patent Office.

ROBERT F. S. HEATH, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 114,556, dated May 9, 1871.

## IMPROVEMENT IN MOSQUITO-BARS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern :*

Be it known that I, ROBERT F. S. HEATH, of the city and county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Mosquito-Bars; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a central vertical section of the device illustrating my invention.

Figure 2 is an enlarged view thereof, in a folded state, a portion of the skirt being removed.

Figures 3, 4, and 5 are views of detached parts.

Similar letters of reference indicate corresponding parts in the several figures.

My invention is an improvement in the class of mosquito-bars, and consists of a central block, which is slotted in order to afford ready means of attachment and guidance for the hinged ears to which the arms of the frame are secured, and enlarged to firmly support said ears when the bar is opened and in use, in combination with said ears, which are constructed with shanks, guides, and shoulders for purposes hereinafter set forth.

It further consists in the ears being constructed of single pieces of metal, and so bent or stamped as to form shanks which enter the opening of the central block and have perforations for the reception of a wire or cord, which holds the frame in place and acts as the fulcrum thereof.

They further form guides for receiving and holding the arms of the frame, and also shoulders, which come to bearings against the enlargement of the central block in order to firmly support the extended frame.

Referring to the drawing—

A represents the central block, consisting of the top portion B, which is provided with a series of vertical slots, grooves, or openings, *a a*, which terminate at the beveled edge of the other portion C, which is an enlargement of portion B.

D represents ears which are hinged to the block A, and have connected to them the arms E, which form the frame-work for support of the material of which the bar is made.

Each ear is constructed of a single piece of metal of such shape that when properly bent or brought together it will form a shank, *b*, guide *c*, and shoulder *d*.

The shanks *b* enter the openings *a a* of the block A, and by means of perforations in said shanks, and a wire or cord, *e*, passing through the perforations, the ears are firmly held in place, but permitted to

swing freely, the wire or cord acting as the axis thereof.

The inner ends of the arms E rest in the guides *c*, and are preferably applied thereto before the ears are bent into shape; but they may be slipped into the guides subsequently to bending of the latter.

The outer ends of the arms are turned down and pierced for attachment of the tapes, over which is secured the material for the top of the mosquito-bar when the arms are extended, and to which the skirt is connected.

The completed device may be suspended by a ring, hook, cord, or otherwise, from the center of the block.

When the bar is to be opened or used, the arms E are extended and fall to a horizontal position.

The shoulders *d d* of the ears then come to a bearing against the sides of the portion C of the block, and limit the downward play of the arms, whereby the latter remain extended without catches or fastenings of any kind. Besides this the strain on the arms and cord or wire is partly transferred to the block, and thus the arms may be made of light material; but the ears perform an important part in assisting to transfer the strain, and as they are of small size, require to be made strong and durable. This is accomplished by constructing them in the manner hereinbefore stated.

The mosquito-bar may be readily folded by pressing down the central block, or by throwing the skirt over the top of the bar so as to bring the arms on the outside, as shown in fig. 2, when the parts may then be folded into a neat and compact form.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The central block, consisting of the portion B, openings *a a*, and enlargement C, in combination with the ears D, consisting of the perforated shanks *b*, guides *c*, and shoulders *d*, and with the arms E and wire or cord *e*, all arranged and operated together in the manner and for the purpose described.

2. The ears D, constructed of single pieces of metal and bent or stamped to form shanks *b*, which guide the ears and provide means for their attachment to the central block, guides *c* for reception and retention of the arms of the frame, and shoulders *d*, to abut against the block and support the extended frame, all as set forth, for the purpose described.

The above signed by me this 10th day of March, 1871.

ROBT. F. S. HEATH.

Witnesses:

JOHN A. WEIDERSHEIM,  
GEO. CHANDLER PAUL.