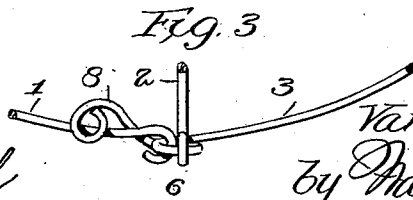
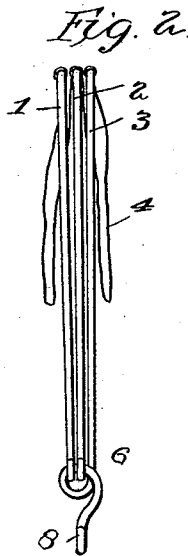
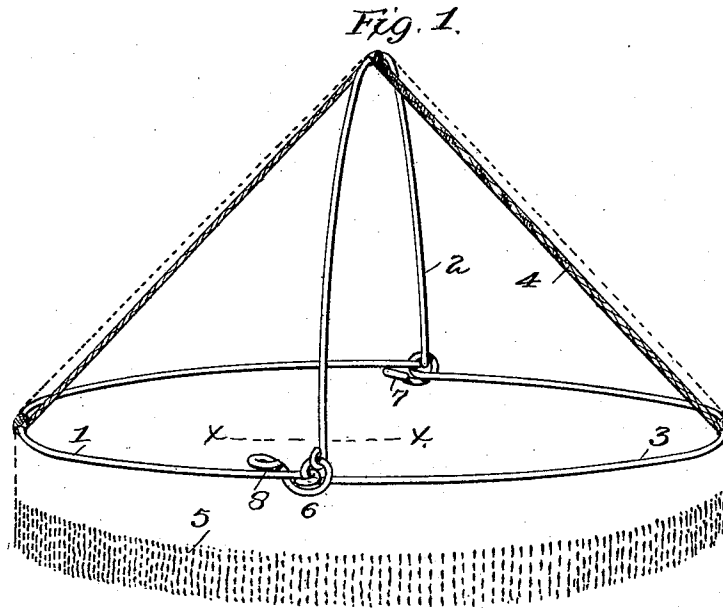


(No Model.)

V. D. COLLINS.
MOSQUITO OR FLY NET.

No. 474,947.

Patented May 17, 1892.



Attest
J. E. Middleton
William Hall.

Inventor
Vernum D. Collins
by Hallen Donaldson & Co.
Attys.

UNITED STATES PATENT OFFICE.

VARNUM D. COLLINS, OF PRINCETON, NEW JERSEY.

MOSQUITO OR FLY NET.

SPECIFICATION forming part of Letters Patent No. 474,947, dated May 17, 1892.

Application filed January 7, 1892. Serial No. 417,303. (No model.)

To all whom it may concern:

Be it known that I, VARNUM D. COLLINS, a citizen of the United States of America, residing at Princeton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Mosquito or Fly Nets, of which the following is a specification, reference being had therein to the accompanying drawings.

It is the object of my invention to provide a canopy for the protection of the head, face, and upper portion of the body against the attacks of mosquitoes and other insects, the invention being intended for use particularly while the person is reclining or lying down. In providing this improved canopy I aim to render it capable of folding into a small compass while not in use, to make it portable, and of such simple construction as will enable it to be manufactured at small expense.

The invention consists of a canopy comprising a suitable netting and a supporting-frame therefor, consisting of three bow-shaped wires, the ends of which are pivotally connected together, two of the bows being arranged to form the base of the frame when unfolded by assuming a horizontal position, while the third bow extends from side to side of the base-frame thus formed in a curve to keep the central portion of the netting elevated.

The invention includes, also, the special means by which the several bows of the frame are locked in unfolded position, and also the means by which the unfolding action is limited.

In the accompanying drawings, Figure 1 represents a perspective view of the canopy in its unfolded position. Fig. 2 represents the frame as folded, and Fig. 3 is a plan view of the locking device.

In the drawings it will be seen that the canopy-frame is made up of three bow-shaped wires or rods 1, 2, and 3. While I prefer to use this number of bows as being amply sufficient, it will be understood that the features of my invention might be embodied in a frame having a larger number of wires. It is essential, however, to the full attainment of the desired result, that the two wires 1 and 3 be arranged to lie in a horizontal plane

when spread out, as shown in the figures, and when in this position the intermediate bow 2 will curve over the base thus formed, it being held by a band or cord 4, attached to the bows of the base-frame. The netting is stretched over the frame, and is secured in any suitable way to the wires of the base-frame 1 3. The covering is continued below the base, either in the form of netting or fringe, as shown at 5. From this construction it will be seen that the canopy is well adapted to be placed over the face of a reclining or sleeping person, the horizontal base-frame enabling it to be supported firmly and closely against the bedclothing and the body of the sleeper, while the depending fringe or netting adapts itself to any inequalities in the surface, and effectually closes all spaces through which the insects might enter the interior of the canopy. At the same time the netting of the canopy is held properly elevated and away from the face of the sleeper by the central bow 2. The hinged connection between the bows is formed by the interlocking hooks or eyes at the ends thereof, as shown at 6, this providing a simple and inexpensive form of connection. In order to limit the spreading action of the bows, an extension is formed on one of the ends of the horizontal bow 3, and this is bent, as at 7, to provide a bearing for the under side of the other horizontal bow, which when opened strikes thereagainst and is prevented from moving farther. In addition to this a limiting or locking extension 8 is formed on the other side of the base at the other joint, and this is of such length as to give slight flexibility, so that it can be pressed aside to allow its end to spring over the upper side of the bow 1, and thus prevent closing movement of the bows. The central bow is held firmly by the band or cord attached thereto and to the base bows.

When the canopy is folded, the bows lie side by side. The frame is preferably made of wire in order to secure strength and lightness.

I claim as my invention—

A canopy-frame consisting of three bows pivoted by their interlocking ends, two of which are horizontal and the other vertical, the wire of one of the horizontal bows being

extended at the joint on one side below the
other horizontal bow to limit the outward
movement of the opposite outer bows and
having also the spring extension at the other
5 joint to be pressed over the other horizontal
bow to retain the two outer bows in open
horizontal position, and the flexible connec-
tion from the outer bows to the central verti-
cal bow for holding it centrally and vertically

over the horizontal bows, substantially as de- 10
scribed.

In testimony whereof I affix my signature in
presence of two witnesses.

VARNUM D. COLLINS.

Witnesses:

FISHER HOWE,
THOMAS WRIGHT.