

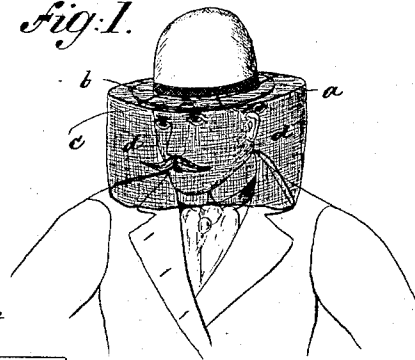
(No Model.)

E. WENIGMANN.  
PORTABLE MOSQUITO NET.

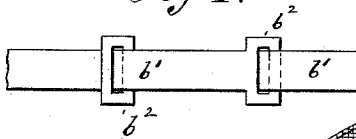
No. 473,599.

Patented Apr. 26, 1892.

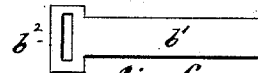
*Fig. 1.*



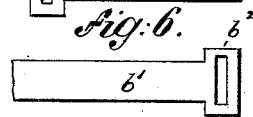
*Fig. 4.*



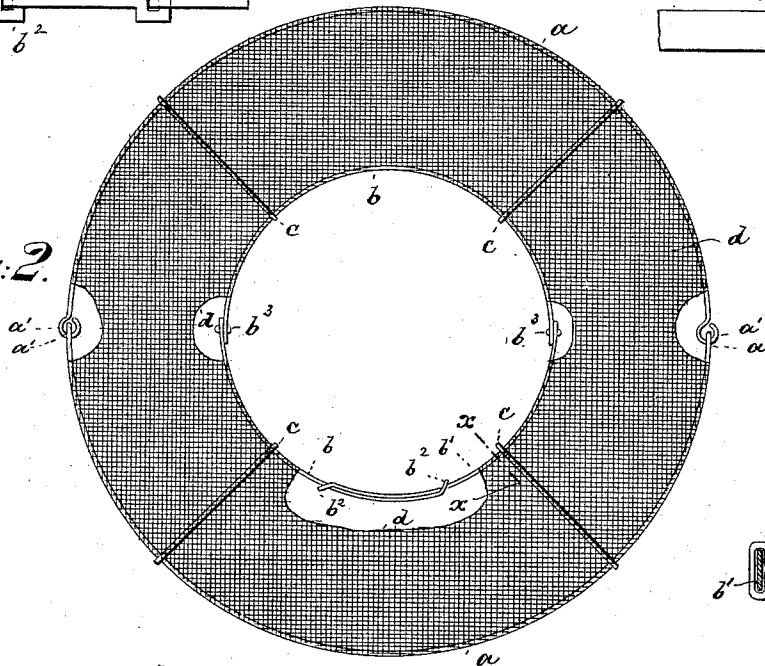
*Fig. 5.*



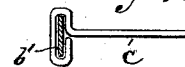
*Fig. 6.*



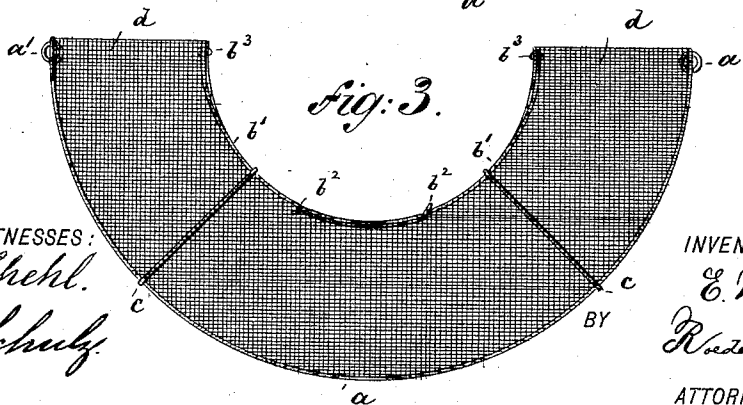
*Fig. 2.*



*Fig. 7.*



*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

ERNEST WENIGMANN, OF NEW YORK, N. Y.

## PORTABLE MOSQUITO-NET.

SPECIFICATION forming part of Letters Patent No. 473,599, dated April 26, 1892.

Application filed February 15, 1892. Serial No. 421,503. (No model.)

*To all whom it may concern:*

Be it known that I, ERNEST WENIGMANN, of New York city, New York, have invented an Improved Portable Mosquito-Net, of which the following is a specification.

This invention relates to a portable mosquito-net adapted to be slipped over the hat, so as to protect the head of the wearer.

It consists in the various features of improvement more fully pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view showing the net in use; Fig. 2, a top view of the net, showing it open; Fig. 3, a similar view showing it folded. Figs. 4, 5, and 6 are details of the metal straps  $b'$ ; and Fig. 7, a section on line  $x x$ , Fig. 2.

The frame of my improved mosquito-net is composed of two concentric rings joined by radial arms. The outer ring is composed of wire and is formed of two halves  $a a$ , joined by means of eyes  $a'$  at the ends, so that it can be folded. The inner ring is formed of band metal and is composed of three sections  $b b' b'$ . The section  $b$  is semicircular and is hinged to the two shorter sections  $b'$  by pins  $b^3$ , in line with eyes  $a'$ . Thus the inner ring may also be folded. The sections  $b' b'$  overlap one another at their free ends and pass through laterally-bent slotted heads  $b^2$ , in which such sections terminate, each section passing of

course through the slotted head of the other section. Thus a slide is produced which causes the band (which is naturally elastic) to tightly embrace hat-crowns of different diameters.

The rings  $a a$  and  $b b'$  are connected by four (more or less) radial wire arms  $c$ , bent around the inner band, Fig. 7, and the outer wire.

The entire frame is covered by mosquito-netting  $d$ , that extends from the inner ring to the outer ring and then falls downward upon or beyond the shoulders. In this way the wearer is fully protected against mosquitoes.

My improved mosquito-netting is more particularly designed to be worn in the country, and it is therefore desirable that it can be readily packed. It will be observed that the net-carrying frame can be doubled upon itself, Fig. 3, so as to occupy but a very limited space.

What I claim is—

The combination of an outer folding sectional ring having eyes  $a'$ , with an inner folding expansible ring having pivots  $b^3$  in line with such eyes and with radial connecting-arms, and netting secured to the rings, substantially as specified.

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Witnesses:

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