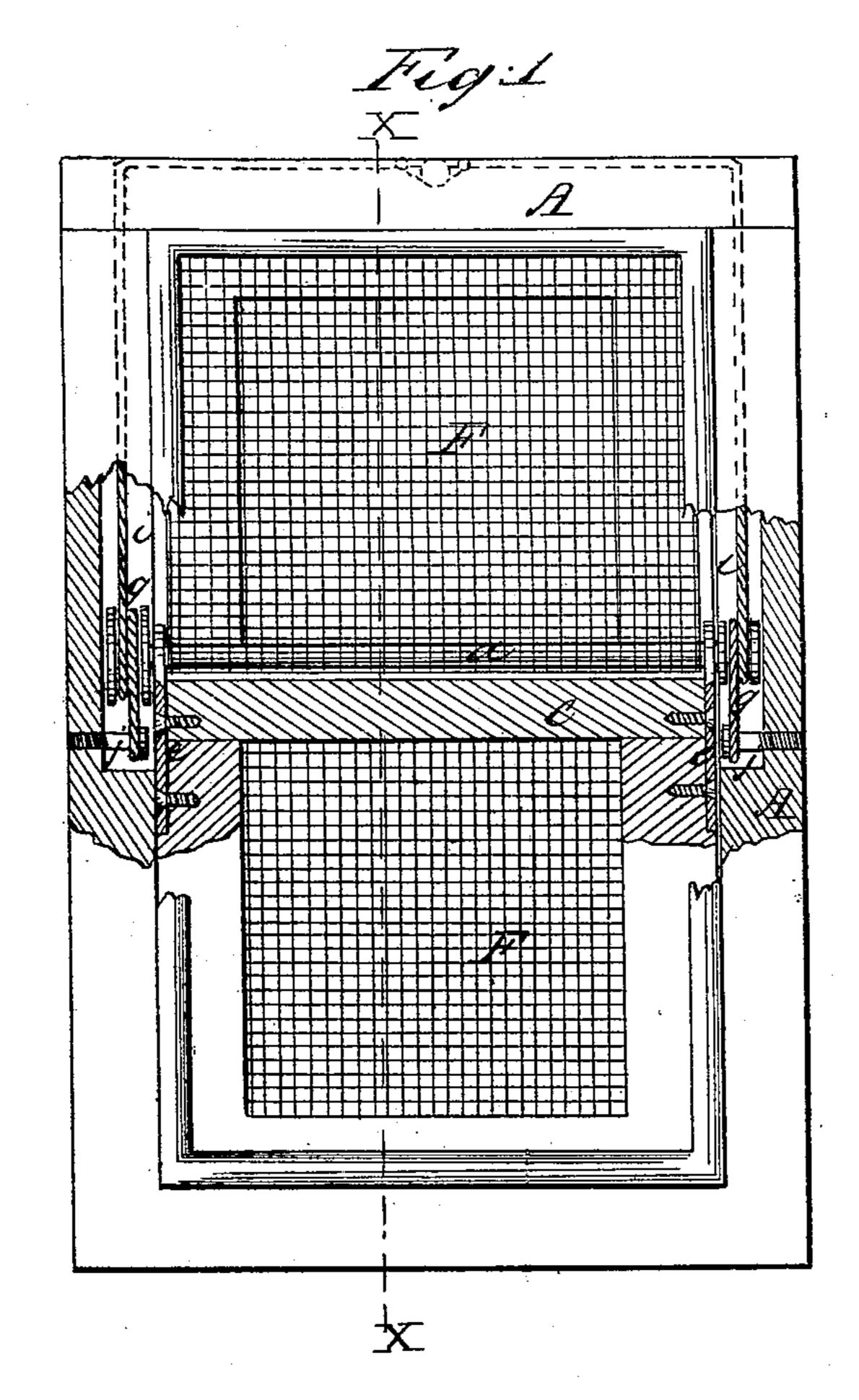
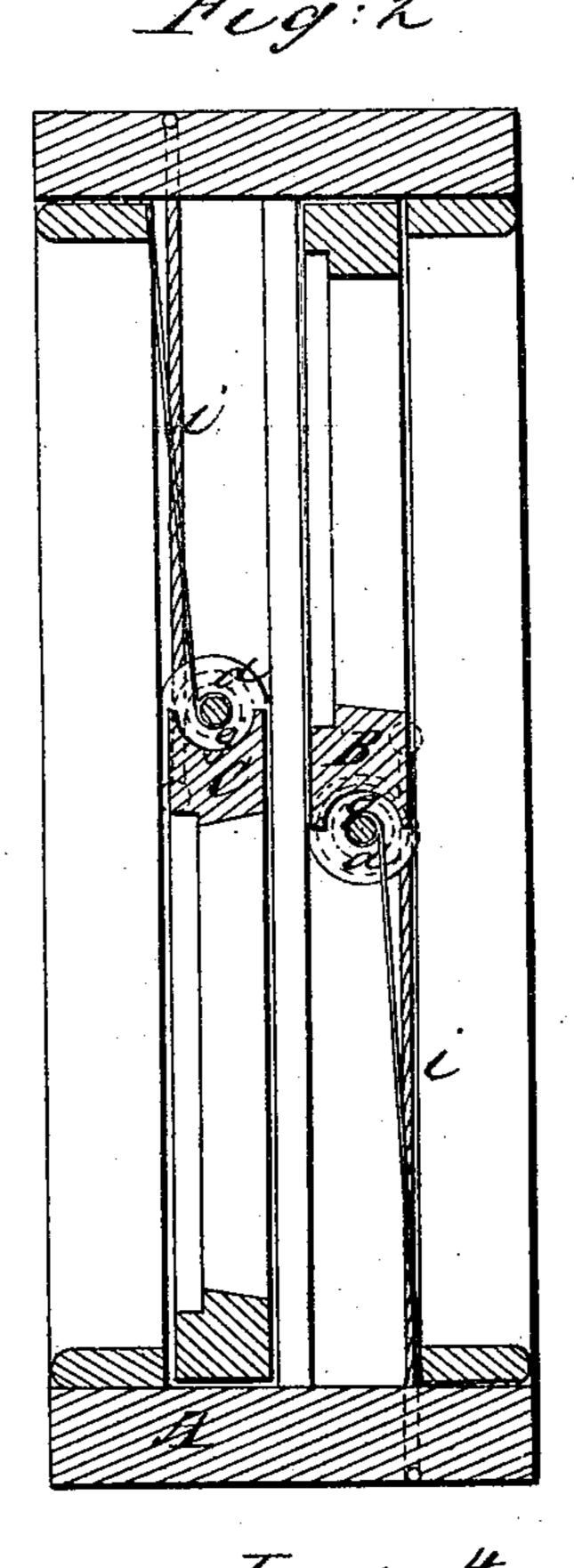
C. T. WARREN. MOSQUITO BAR FOR WINDOW.

No. 79,419.

Patented June 30, 1868.



Witnesses Ifm a Morgan G. C. Cotton



Inventor G. T. Warren per Munyles Attorneys

Anited States Patent Office.

C. T. WARREN, OF LINDEN, NEW JERSEY.

Letters Patent No. 79,419, dated June 30, 1868.

IMPROVED MOSQUITO-BAR FOR WINDOWS.

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, C. T. Warren, of Linden, in the county of Union, and State of New Jersey, have invented a new and useful Improvement in Window Mosquito-Bar; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to the manner in which mosquito-bar gauze or netting is operated so as to prevent

the entrance of those pests into a room through the windows.

And it consists in operating the bar, either rolling up or unrolling it by the act of raising and lowering the sashes, by means of fixed cords and rollers, as will hereinafter be more fully described.

Figure 1 is a front view of a window provided with mosquito-bars, operated according to my invention.

Figure 2 is a vertical cross-section of the same through the line x x.

Similar letters of reference indicate corresponding parts.

A represents the window-frame or casing.

B is the lower sash, and

C is the upper sash.

To the bottom of the lower sash and to the top of the upper sash, rollers, d, are attached by plates e, which are screwed on to the edge of the sashes, as seen in fig. 1.

In this figure the upper sash is seen down, and the netting F unrolled.

The rollers d are let into the sashes (more or less) by grooving the sash-rails, as seen in fig. 2. To each end of the rollers there is a pulley, g.

i represents cords, which are attached to screws j, fixed to the casing at the lower end. These cords may pass through the casing and be attached together at their other ends, as seen in the drawing, or fastened separately, as may be most desirable.

As seen in the drawing, the cords are passed once around the pulleys, so that the act of raising or lowering

the sash revolves the roller and rolls up or unrolls the bar or netting.

The pulleys on the roller may be of different diameters, so that one will revolve faster than the other, for the purpose of taking up any slack in the netting, and they may be so arranged that one pulley will revolve the roller when the sash is raised, and the other revolve it when it is lowered; but in either case the cord would pass over the pulleys in the same manner, and be revolved on stationary cords, as shown and described.

It will be seen that by this arrangement the space for either the upper or lower sash is effectually barred

and protected from mosquitoes when they are raised or lowered.

The difficulty of adjusting separate mosquito-bar frames for each sash is entirely obviated.

When my mosquito-bars are once attached to the window, they can remain, without requiring any attention. There are no springs or weights, and the action is entirely automatic, as regards the rolling and unrolling of the bar.

I claim as new, and desire to secure by Letters Patent-

1. Rolling and unrolling the mosquito-netting by the movement of the sash carrying the roller d upon the cord i, substantially as described, for the purpose specified.

2. The mosquito-bar or netting, operated as described, by means of the rollers attached to the sashes, the pulleys g, cords i, and screws j, substantially as described, for the purpose specified.

The above specification of my invention signed by me, this 22d day of May, 1868.

C. T. WARREN.

Witnesses:

FRANK BLOCKLEY, ALEX. F. ROBERTS.