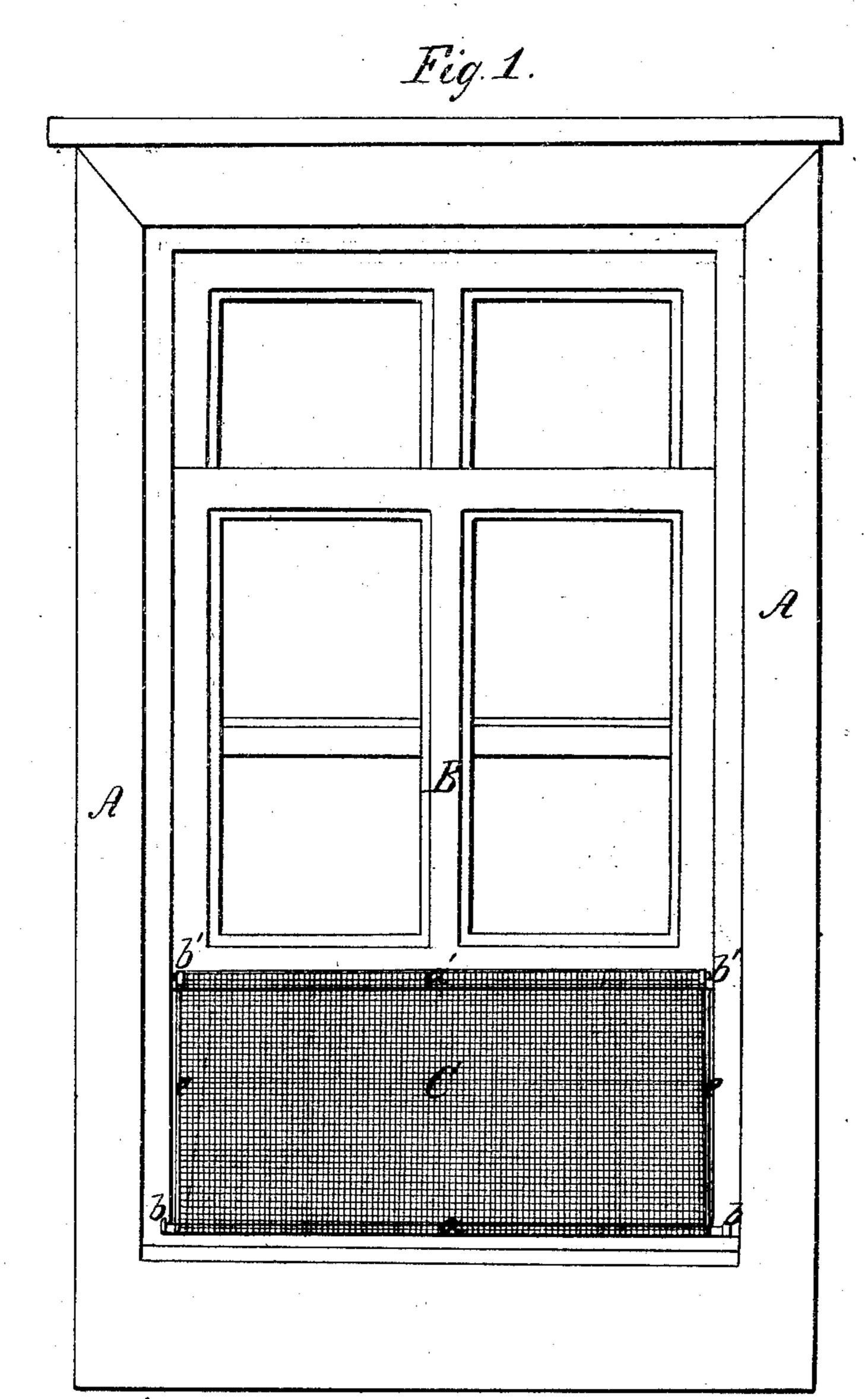
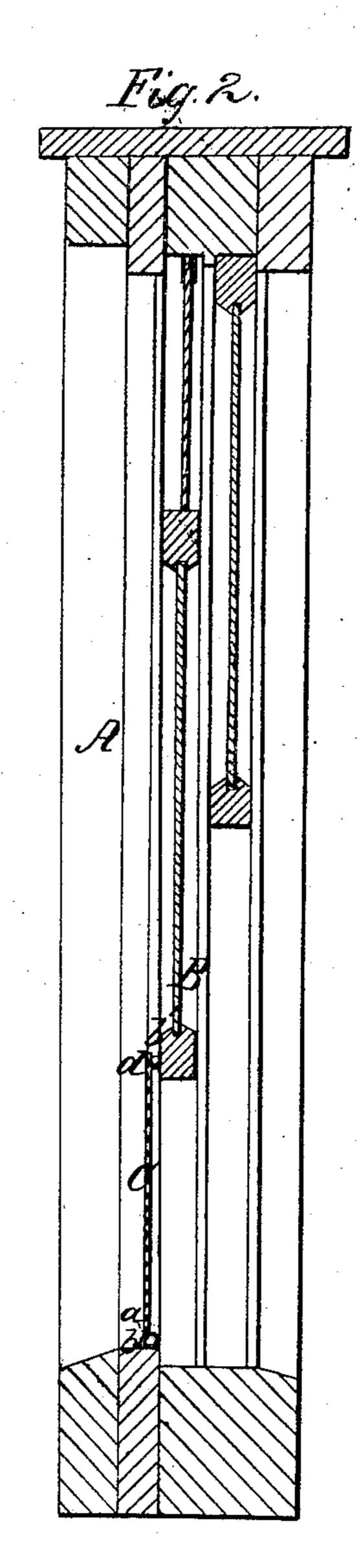
M. M. Living Ston,

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Faterited July 1. 1862.





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United States Patent Office.

M. M. LIVINGSTON, OF BROOKLYN, NEW YORK.

IMPROVED MODE OF APPLYING NETTING TO WINDOWS.

Specification forming part of Letters Patent No. 35,767, dated July 1, 1862.

To all whom it may concern:

Be it known that I, M. M. LIVINGSTON, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Mode of Applying Netting to Windows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of a window frame and sash, showing my invention applied to them. Fig. 2 is a longitudinal vertical section of the same, taken in the line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts in both figures.

The object of my invention is to apply to a window the fabric that may be desired for either a dust-screen or a mosquito-net in such manner that the same shall be self-adjusting, and also so arranged that the whole appliances may be easily and quickly removed from the window.

My invention consists, first, in the employment or use of elastic bands or equivalents thereof secured in the sides of the netting for the purpose of contracting the fabric when the window-sash is lowered, or, more explicitly, for making the fabric conform to any distance it may be desired to have the window open, and also for keeping said fabric tight up against the weather strips of the window.

It consists, secondly, in the arrangement, hereinafter described, of two bars, they being secured to the lintel and sash of the window in such manner that they may be instantaneously and easily removed therefrom, bringing with them the fabric also, and as readily applied

again.

To enable others skilled in the art to fully understand my invention, I will proceed to describe its construction and operation with reference to the accompanying drawings.

A is a window-casing, and B the lower sash, both constructed and operating in the usual

manner.

a a' represent two rods of brass of a length corresponding to the width of the sash and to the inside of the casing to which they are applied. (See Fig. 1.) Any other elastic metal may be used in lieu of brass, if desired—say, iron or steel japanned to prevent rust. These rods are held in place by screw-rings b or

hooks b', the rings b being screwed into the lintel of the window A close to the side weatherstrip, and the hooks b' being driven into the sash B sufficiently high to clear the lintel when the sash is fully lowered.

To the rods a a is secured the fabric C, designed for the screen or net, by running the said rods through hems in the top and bottom of the fabric, or in any other suitable way.

In each side of the fabric C is woven or otherwise secured an elastic cord, e, of india-rubber, which cords pass over the bars a a', so as to connect them together. These cords are cut of such a length that when at their farthest tension they will just permit the sash to be fully raised.

I propose to use, when it may be desirable, in lieu of the elastic cords or bands a non-elastic cord with a weighted tassel, one end of the cord being fastened to the rod a, thence passing up through the side of the netting, over the rod a', and having pendent from its other end a weighted tassel. This arrangement I find will serve to gather up the netting as the sash is lowered, and also keep it (said netting) close up against the weather-strips.

From this brief description it will be seen that when the sash is raised the elastic cords will stretch and cause the netting to conform to any height to which the sash may be raised, at the same time keeping the fabric close up against the weather strips, and thus preventing the ingress of dust or mosquitoes. It will also be seen that whenever it is desired to remove the netting from the windows a slight strain at the centers of the rods will cause the ends to spring out, and hence the whole screen may be easily and quickly removed and again applied with equal facility.

Screens constructed and applied according to this invention will be found to be simple, cheap, easy of application, and far more desirable than the common square-frame screens or the spring-roller screens, for in the former case the openness of the window cannot be regulated, and in the latter the fixture cannot be removed without much trouble, and they are also expensive. Thus it will be seen that screens constructed and applied according to my mode are not only self-adjusting, but are also capable of being easily and quickly re moved from the window. They may be ap

plied to both the upper and lower sashes of a window at the same time, thus insuring as free a ventilation of a room as is desirable, without the possibility of the annoyance caused by the ingress of mosquitoes or dust.

It may be well to add that dust-screens constructed and applied according to my mode will be found most desirable on the windows of railroad - cars, for the reason that they are cheap, compact, and so simple as not to be liable to get out of order from rough handling.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The application of the fabric C, provided with elastic cords or bands e, or an equivalent thereof, passing through its sides, to the casing and frame of a window, in combination with the rods a a' and rings or hooks b b', or their equivalents, arranged and operating substantially as and for the purpose herein set forth.

M. M. LIVINGSTON.

Witnesses:

HENRY T. BROWN, J. W. COOMBS.