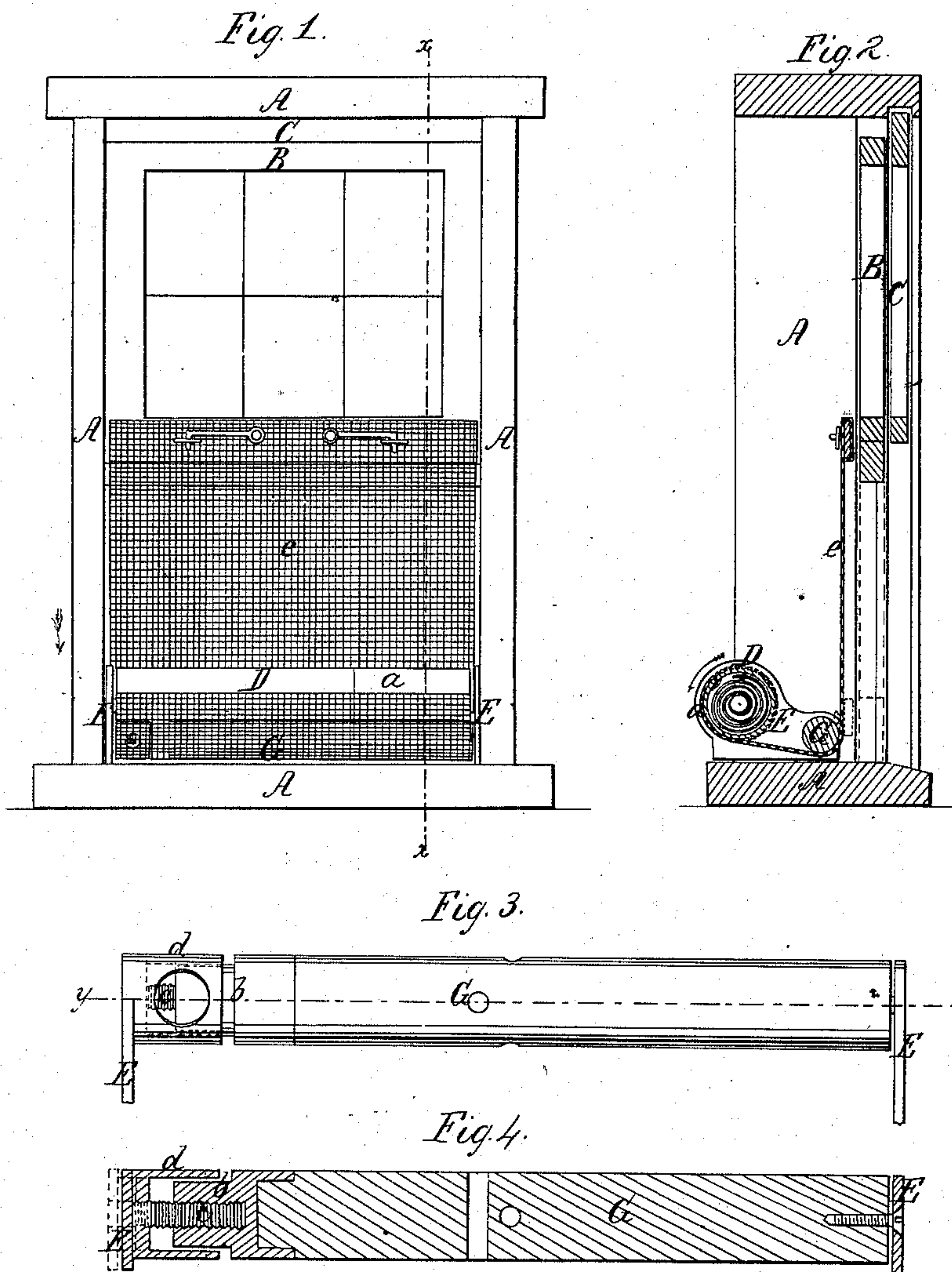


L. Sawyer.
Window Screen.

No. 1,030.
32,034.

Patented Apr. 9, 1861.



Witnesses;
James Laird
Levis A. Tucker

Inventor;
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UNITED STATES PATENT OFFICE.

LANGDON SAWYER, OF SPRINGFIELD, VERMONT, ASSIGNOR TO HIMSELF AND A. M. BILLINGS.

SHADE OR CURTAIN ROLLER.

Specification of Letters Patent No. 32,034, dated April 9, 1861.

To all whom it may concern:

Be it known that I, LANGDON SAWYER, of Springfield, in the county of Windsor and State of Vermont, have invented a new and Improved Roller for Window-Shades, Netting, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a view of the inside of a window having my improved roller applied to it, for operating a mosquito net which is applied to the lower window sash. Fig. 2, is a transverse section through Fig. 1, in the vertical plane indicated by red line *x, x*, thereon. Fig. 3, is an enlarged exterior view of the improved roller. Fig. 4, is a longitudinal section through Fig. 3 in the red line *y, y*.

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

The object of this invention is to so construct the bar, under which the netting or shade passes from a spring roller which winds up the shade, or netting, as the case may be, that the whole fixture may be applied to window frames varying in widths and secured therein with very little labor, without employing the usual fixtures which are secured to and which mutilate the casing of the window.

The nature of my invention consists in making said rod, under which the netting or shade passes, adjustable longitudinally, and in securing to the ends of this rod the plates or brackets, on which the spring roller has its bearings, as will be hereinafter described, whereby the roller and bearing plates may be extended and thus adapted to, and secured within any ordinary window frame in a substantial manner.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings: A, represents an ordinary window casing, or frame within which the window sashes B, and C, slide up and down either by weights and pulleys or in any other suitable manner. To this window frame A, with its sashes my invention is to be applied.

D, represents a roller having a cylindrical barrel *a*, on one end which contains a common clock spring which being attached to

a fixed pivot on which the roller D, has its bearings, acts upon this roller and is coiled up when the roller is turned in the direction indicated by the arrows in Figs. 1 and 2 of the drawings, and which recoils when the roller is allowed to rotate in an opposite direction. This roller D, has its pivot bearings in two end plates E, E, as shown in Figs. 1 and 2 of the drawings, which plates, or bearing blocks, are attached to the roller.

Extending across from plate E, to plate E, and parallel with roller D, is a round rod G, as shown in Figs. 1, 2, 3, and 4 of the drawings, which may be secured rigidly at its ends to the plates E, E, or so attached to these plates as to rotate and form a friction roller. The object of using this rod G, hitherto has been to keep the shade, or more particularly mosquito netting down close to the window sill so as to prevent insects from crawling under the netting, but with my improvement applied to the rod G, it also serves another equally important office, which will be hereinafter explained. On one end of rod G, a metal ferrule *b*, is secured having a hole through its axis in which a female screw thread is cut as shown in the enlarged view, Fig. 3. The screw *c*, which passes in the hole in ferrule *b*, is of a considerable length as shown in Fig. 3, and this screw is secured to the inside of one of the plates E, E. Surrounding screw *c*, and concentric with its axis is a metal tube, or socket *d*, which in its exterior diameter is equal to the diameter of the rod G, so that the whole will fit together and appear as one bar. The socket *d*, is as long as the screw stem *c*, and the end of the ferrule *b*, fits into the socket *d* the socket being secured to the plate E. Thus it will be seen that by unscrewing the rod G, from the socket, the plates E, E, will be separated farther apart, and by screwing up the rod G, the plates E, E, will approach each other until the end of socket *d*, comes in contact with the shoulder on the ferrule *b*.

The opposite end of the roller D, to that carrying the spring box *a*, has a hole bored in its center the same length of the screw stem *b*, on the plate E, and into this hole a pin which projects from plate E, passes so that the roller will turn on this pin.

The shade or mosquito net *e*, is tacked to the roller D, and passes under the extension rod G, and is secured to the lower rail of

the lower window sash B, by hooks and eyes or any other suitable device, so that when the sash B, is raised, the shade, or mosquito net, whichever be used, will be
5 drawn up and unwound from roller D. When the window is depressed the spring in roller D, will cause this roller to wind up the netting again.

Now from the foregoing description it
10 will be seen that by means of the extension rod G, the plates E, E, may be extended or contracted and the fixtures may be clamped securely within any ordinary sized window casing without nails or screws, brackets, or
15 the bearing plates, &c., which have been heretofore employed, which injure the appearance of the window frame and require the rollers to be especially adapted to them, as well as to the window for which they are
20 to be used. With my extension rod the whole shade or netting can be readily ap-

plied to a window and removed in a few minutes.

This extension rod hereinabove described, may be applied with great advantage to or- 25 dinary shade fixtures where a common roller to which the shade is attached, is used instead of the spring roller.

Having thus described my invention, what I claim as new and desire to secure by Let- 30 ters Patent, is,

Making the rod, or roller G, so that it can be extended or contracted longitudinally, where the same is combined with the other fixtures for operating the shade or netting, 35 substantially as and for the purposes herein described.

LANGDON SAWYER.

Witnesses:

JAMES LAIRD,

LEWIS A. TUCKER.