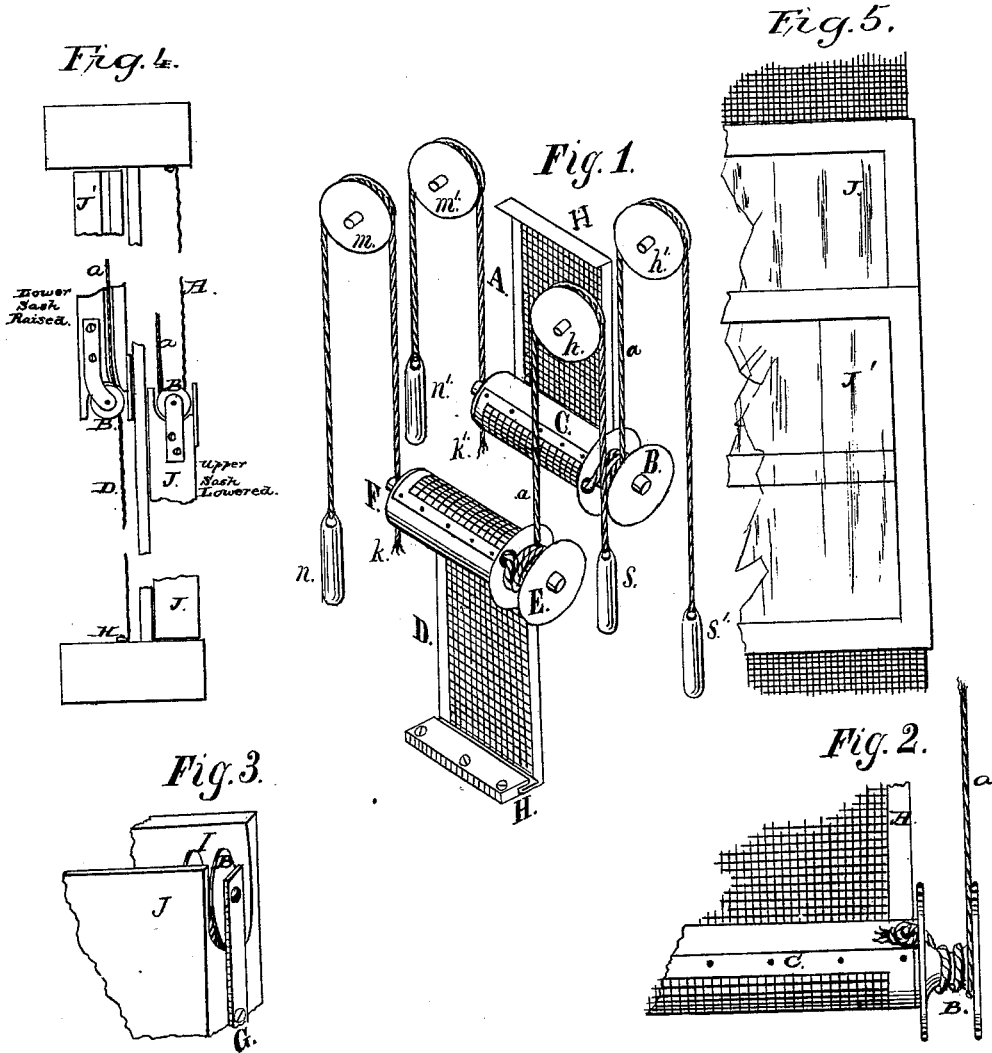


G. L. REYNOLDS.
Window-Screen.

No. 204,375.

Patented May 28, 1878.



Witnesses.

N. M. Batt
R. B. York

Inventor.

G. L. Reynolds
Notary Public
County Clerk

UNITED STATES PATENT OFFICE.

GEORGE L. REYNOLDS, OF OAKLAND TOWNSHIP, ALAMEDA COUNTY, CAL.

IMPROVEMENT IN WINDOW-SCREENS.

Specification forming part of Letters Patent No. **204,375**, dated May 28, 1878; application filed August 29, 1877.

To all whom it may concern:

Be it known that I, GEO. L. REYNOLDS, of Oakland township, in the county of Alameda and State of California, have invented a new and useful Improvement in Window-Screens, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of the invention is to effect an improvement in the class of window-screens in which the upper and lower wire screens are attached, at one end, directly to the sashes, so that when the latter are raised or lowered to open them the screens will be extended over the opening, and thus exclude flies, mosquitoes, or other insects without excluding air.

The invention, in this instance, consists in journaling a screen-roller in a groove formed in the meeting-rail of a sash, and in attaching one balance-cord to the journal of the roller and the other balance-cord to the sash, as and for the purpose hereinafter stated.

In the accompanying drawings, Figure 1 shows a perspective view of the arrangement of my screens; Fig. 2, a detail, showing a portion of the screen and roller; and Fig. 3, another detail, showing the bearing of the screen-roller and the groove in the sash to receive the roller. Fig. 4 is an edge view of two sashes having screens attached according to my invention, the lower sash being raised and the upper sash lowered. Fig. 5 is a front view of a fragment of two sashes with screens attached.

A D represent screens, which may be formed of any suitable material, having one end of

each attached to the window-casing by strip H, and the other to rollers C F, provided with spools B B to receive the cords *a a*. The free ends of these cords pass over pulleys *h h'*, and are connected to weights S S', the whole being so arranged that as the sashes are opened the screens are unwound from the roller, and as the sashes are closed the screens are again wound up.

The cords *a a*, pulleys *h h'*, and weights S S' may be the same devices usually employed for balancing the sashes, the cords on one side of the sashes being detached for that purpose and attached to the spools of the rollers. The cords *k k'*, pulleys *m m'*, and weights *n n'* on the opposite side of the sashes are still to be used to counterbalance the sashes, as usual, and have no connection with the screens.

At the top of the upper sash J, and on the under side of the lower sash J', are to be cut grooves I to receive the rollers, both ends of the grooves being provided with bearings G for the gudgeons of the rollers; or the rollers may be attached to suitable bearings on the faces of the sashes.

What I claim as new is—

A window-sash in the meeting-rail of which is journaled a screen-roller, and having one balance-cord secured upon the pulley of said roller and the other balance-cord attached direct to the sash, substantially as and for the purpose specified.

GEO. L. REYNOLDS.

Witnesses:

D. W. PRATT,
JOHN YULE.