

(No Model.)

A. LAMBERT.
WINDOW SCREEN.

No. 587,743.

Patented Aug. 10, 1897.

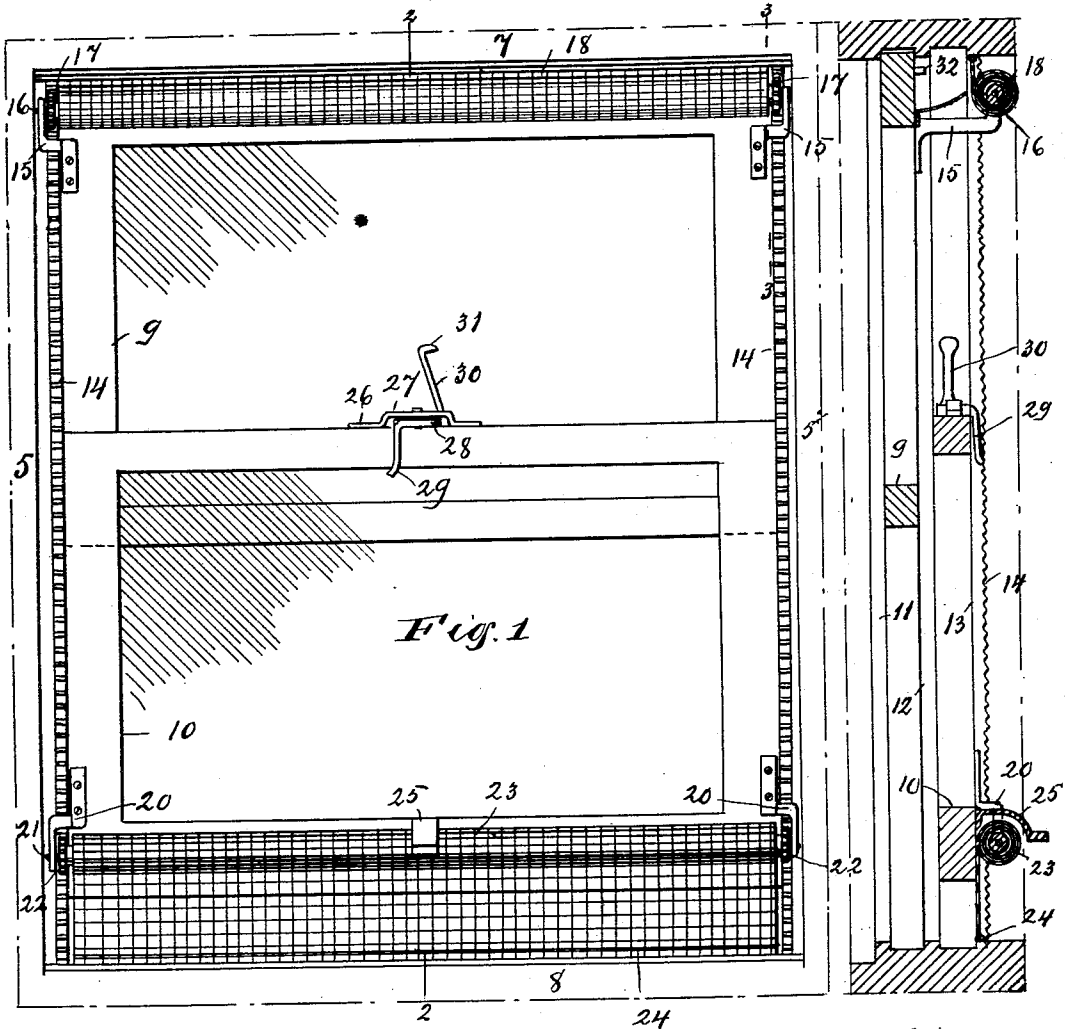
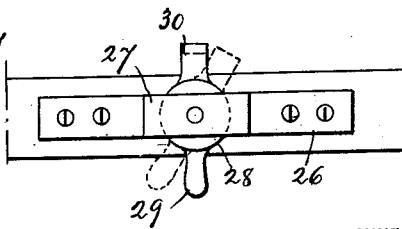
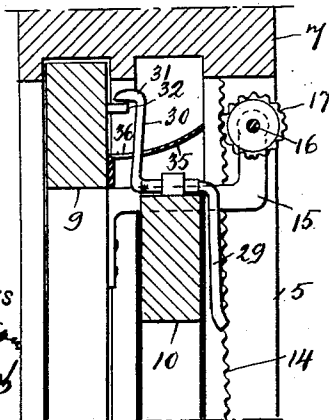


Fig. 2

Fig. 3

WITNESSES
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WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 587,743, dated August 10, 1897.

Application filed February 3, 1897. Serial No. 621,859. (No model.)

To all whom it may concern:

Be it known that I, ALONZO LAMBERT, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Window-Screens, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to window-screens; and the object thereof is to provide a screen or screens for windows which are connected with the frame of the window and with the sashes in such a manner that when the upper sash is lowered a screen connected therewith is unwound from a roller carried by said sash and closes the space left opened by the lowering of the sash and in which the lower sash is also provided with a screen which is mounted on a roller connected therewith, said screen being also connected with the lower part of the frame, so that when the lower sash is raised the screen will be unwound from said roller, so as to close the space left opened by the said sash; and with these and other objects in view the invention consists in the construction, combination, and arrangements of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in which—

Figure 1 is an inside view of a window provided with my improvement; Fig. 2, a section thereof on the line 2 2; Fig. 3, a partial section on the line 3 3, on an enlarged scale, and showing the upper and lower sashes locked together; and Fig. 4, a plan view of a lock which I employ for connecting the upper and the lower sashes.

In the drawings forming part of this specification, reference being made to Fig. 1, I have shown a window-frame the sides of which are designated by the reference-numeral 5 and the top and bottom thereof by the reference-numerals 7 and 8, respectively, and mounted therein are the upper and the lower sashes 9 and 10.

The sashes are held in place by the usual beads or strips 11, 12, and 13, and the upper sash 9 is mounted between the beads or strips 11 and 12 and the lower sash between the beads or strips 12 and 13, and in practice I secure to the front of the beads or strips 13, at each side of the frame, a rack-bar 14, or said beads or strips 13 may themselves constitute the rack-bar.

The upper sash 9 is provided with arms 15, which are secured thereto and near the upper part of the sides thereof and which project outwardly and upwardly and in which is mounted a roller 16, each end of which is provided with a ratchet-wheel 17, and these ratchet-wheels operate in connection with the rack-bars 14. At the sides of the frame of the window and wound on the roller 16 is a screen 18, one end of which is secured thereto and the other to the upper part of the frame, and as the upper sash is lowered the roller 16 is unwound by the ratchet-wheels 17 and the rack-bars 14, and the screen will close the space left open by said sash, and as said sash is raised the screen 18 will be wound up by said roller, as will be readily understood.

The lower sash 10 is provided at each side and near the lower part thereof with arms 20, similar to the arms 15, which are secured to the upper sash, and these arms project outwardly and downwardly over the rack-bars 14 and also carry a roller 21, on the ends of which, within said arms, are mounted ratchet-wheels 22, which operate in connection with the rack-bars 14, and wound on the roller 21 and secured thereto is a screen 23, similar to the screen 18, and which is also secured to the lower part of the frame of the window at 24, and as the lower sash is raised the screen 23 will be unwound and will close the space left open by raising the sash, and when the sash is lowered the screen 23 will be again wound on the roller 21.

Secured to the lower part of the lower sash and centrally thereof is an outwardly and downwardly directed arm 25, by which said sash may be raised or lowered, and secured to the upper part of said lower sash is a plate 26, provided with a central raised portion 27, beneath which is mounted a locking device consisting of a circular plate 28, which is pro-

vided with an outwardly and downwardly directed arm 29 and a backwardly and upwardly directed arm 30, which is provided at its upper end with a backwardly-directed lug or projection 31, and when the upper sash is lowered to its lowest position or the lower sash raised to its highest position, as shown in Fig. 3, the arm 29 may be manipulated so as to cause the lug or projection 31 on the arm 30 to engage with a pin 32, which is secured to the upper sash, centrally thereof, as shown in Figs. 2 and 3. By this means, as will be understood, the lower sash may be locked in its highest position, and said sashes may be locked together and raised or lowered while so locked together, as will be apparent.

The upper part of the upper sash 9 is also provided with a downwardly and upwardly curved plate 35, as shown in Fig. 3, which is adapted to close the space between the roller 16 and the said upper part of the sash, and said plate is provided centrally with a hole or opening 36, through which the arm 30 of the lock passes.

It will thus be seen that I accomplish the object of my invention by means of devices which are simple in construction and operation, and the screens 18 and 23 may be composed of fine wire-netting or any preferred material, and it will also be apparent that changes in and modifications of the construc-

tion herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

The herein-described window-screen, comprising the combination with the frame and sash of a window of rack-bars 14, the upper sash being provided with arms 15; a roller 16 mounted therein; ratchet-wheels 17 secured to said roller; a screen 18 wound on said roller; the lower sash being provided with similar arms carrying a roller provided with ratchet-wheels adapted to engage the rack-bars 14, and provided with a screen 23 secured to the frame at 24; said upper sash being provided with a pin 32; and a plate 35 having an opening 36, and the lower sash being provided with an arm 25, a plate 26 having a raised portion 27; a circular plate 28 provided with an arm 29 and an arm 30 having a lug 31, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 2d day of February, 1897.

ALONZO LAMBERT.

Witnesses:

A. L. PICKARD,
L. M. MULLER.