

H. PETERSEN.
WINDOW SCREEN.
APPLICATION FILED SEPT. 30, 1909.

969,977

Patented Sept. 13, 1910.

Fig. 1.

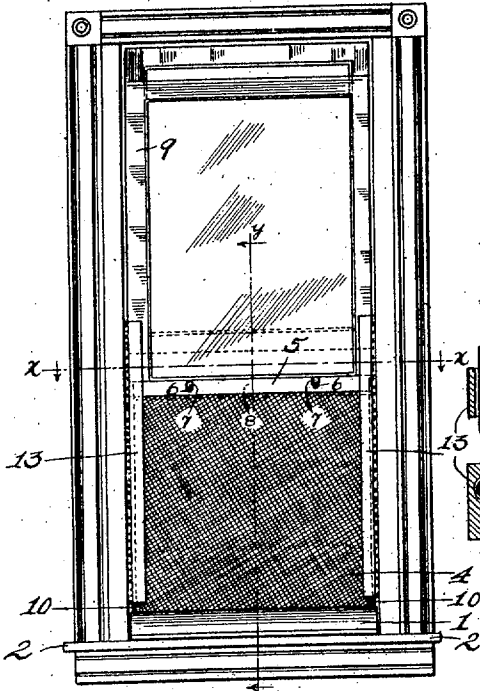


Fig. 3.

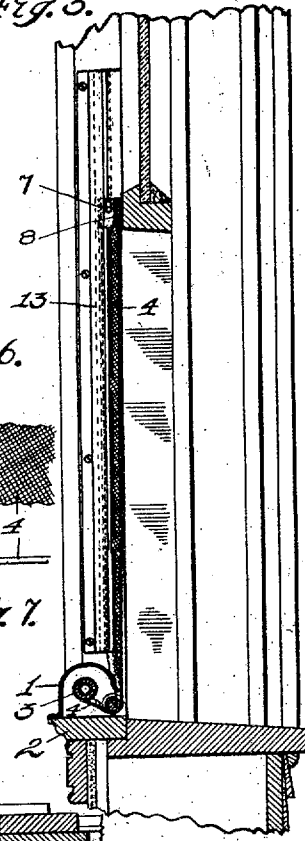


Fig. 6.

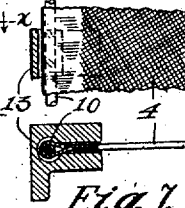


Fig. 7.

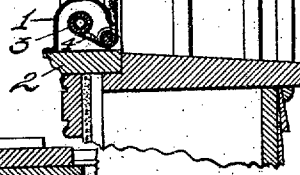


Fig. 2.

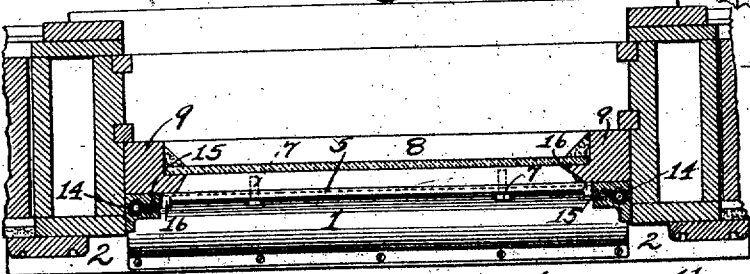


Fig. 8.

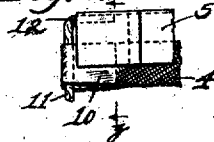
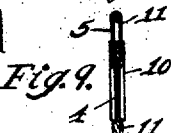


Fig. 4.



Fig. 9.



Witnesses:

C. E. Wessels.

B. G. Richards

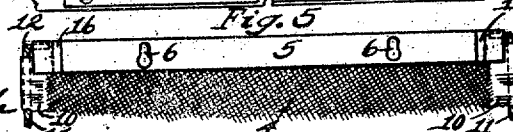
Inventor:

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Fig. 5.



UNITED STATES PATENT OFFICE.

HENRY PETERSEN, OF CHICAGO, ILLINOIS.

WINDOW-SCREEN.

969,977.

Specification of Letters Patent.

Patented Sept. 13, 1910.

Application filed September 30, 1909. Serial No. 520,409.

To all whom it may concern:

Be it known that I, HENRY PETERSEN, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful improvements in Window-Screens, of which the following is a specification.

My invention relates to improvements in window screens and has for its object the production of a window screen which may be attached to a window sash to follow said sash up and down so as to always keep the window screened when the sash is open and which shall be of simple and economical construction and effective in operation.

My invention consists in the combination and arrangement of parts hereinafter described and claimed.

My invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is an interior elevation of a window equipped with a screen embodying my invention; Fig. 2, an enlarged section on line $x-x$ of Fig. 1, Fig. 3, an enlarged section on line $y-y$ of Fig. 1, Fig. 4, an enlarged partial horizontal section through the housing containing the screen, Fig. 5, an elevation of the upper end of the screen, Fig. 6, an enlarged elevation of a side edge of the screen, Fig. 7, a section at right angles to Fig. 6, Fig. 8, an enlarged elevation of an upper corner of the screen, and Fig. 9, a section on line $z-z$ of Fig. 8.

In a suitable housing 1 secured to window sill 2 is mounted a spring roller 3 having a flexible screen netting 4 wrapped thereon. To the upper edge of netting 4 is secured a metallic member 5 which is secured thereto by being bent over the edge of said netting. Member 5 is provided with notches 6 having enlarged lower ends and narrower upper ends adapted to engage over buttons 7 on the lower rail 8 of the window sash 9. The screen netting 4 may be of flexible wire or other suitable material but is preferably made of linen threads forming the central mesh portion and having unmeshed solid loop portions 10 woven thereto. A flexible cord 11 is threaded in loop 10 and has its upper end 12 bent inwardly and secured in member 5 by having the latter bent thereover, as indicated in Fig. 8. Guide members 13 are secured to the window frame

along the lower sash. These guide members are provided with interior channels 14 adapted to receive the cords 11 and loops 10 and narrower slots 15 communicating with channels 14 and adapted to receive the screen netting are also provided. The member 5 is provided with outwardly bent ends 16 adapted to run in slots 15 as indicated in Fig. 2.

While I have illustrated and described the preferred construction for carrying my invention into effect this may be modified or varied without departing from the spirit of the invention. I, therefore, do not wish to be limited to the exact details of construction set forth, but wish to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. In a window screen, the combination with a window sash and frame therefor, of a housing secured to the window sill; a spring roller mounted in said housing; a flexible sheet of netting wrapped upon said roller; a cord secured to the side edges of said netting; guides for said netting provided with an interior channel adapted to receive said cord and a narrower slot communicating therewith and adapted to receive said netting; a substantially U-shaped metallic member secured over the upper edge of said sheet by being compressed thereon and onto the upper ends of said side cords which are bent inwardly to lie within the same; and means for securing said member to the lower rail of said window sash, substantially as described.

2. In a window screen, the combination with a window sash and frame therefor, of a housing secured to the window sill; a spring roller mounted in said housing; a flexible sheet of netting wrapped upon said roller; a cord secured to the side edges of said netting; guides for said netting provided with an interior channel adapted to receive said cord and a narrower slot communicating therewith and adapted to receive said netting; a substantially U-shaped metallic member secured over the upper edge of said sheet by being compressed thereon and onto the upper ends of said cords which are bent inwardly to lie within the same, the said member being provided with keyhole slots; and

buttons on the lower rail of said window sash adapted to enter said slots, substantially as described.

3. In a window screen, the combination
5 with a window sash and frame therefor, of a housing secured to the window sill; a spring roller mounted in said housing; a flexible sheet of cloth netting having a loop
10 said roller; a cord threaded in said loop; guides for said netting provided with an interior channel adapted to receive said cord and a narrower slot communicating there-
15 with and adapted to receive said netting; a metallic member secured to the upper edge of said netting and having outwardly bent ends adapted to travel in said guide slot; and means for securing said member to the
20 lower rail of said window sash, substantially as described.

4. In a window screen, the combination with a window sash and frame therefor, of a housing secured to the window sill; a spring roller mounted in said housing; a

flexible sheet of cloth netting having a loop 25 woven in its side edges and wrapped upon said roller; a metallic member secured across the top of said netting by being bent over the edge thereof and provided with outwardly bent ends; cords threaded in said netting 30 loops and having their upper ends turned in and secured in the outwardly bent ends of said metallic member; a guide mounted on said frame adjacent said sash and provided with an interior channel adapted to 35 receive said cord and a narrower slot communicating therewith and adapted to receive said outwardly bent ends of said metallic member and said netting; and means for securing said metallic member to said sash, 40 substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY PETERSEN.

Witnesses:

JOSHUA R. H. PORTS,
JANET E. HOGAN.