

B. W. JONES.
WINDOW SCREEN.
APPLICATION FILED JAN. 10, 1918.

1,370,500.

Patented Mar. 1, 1921.
2 SHEETS—SHEET 1.

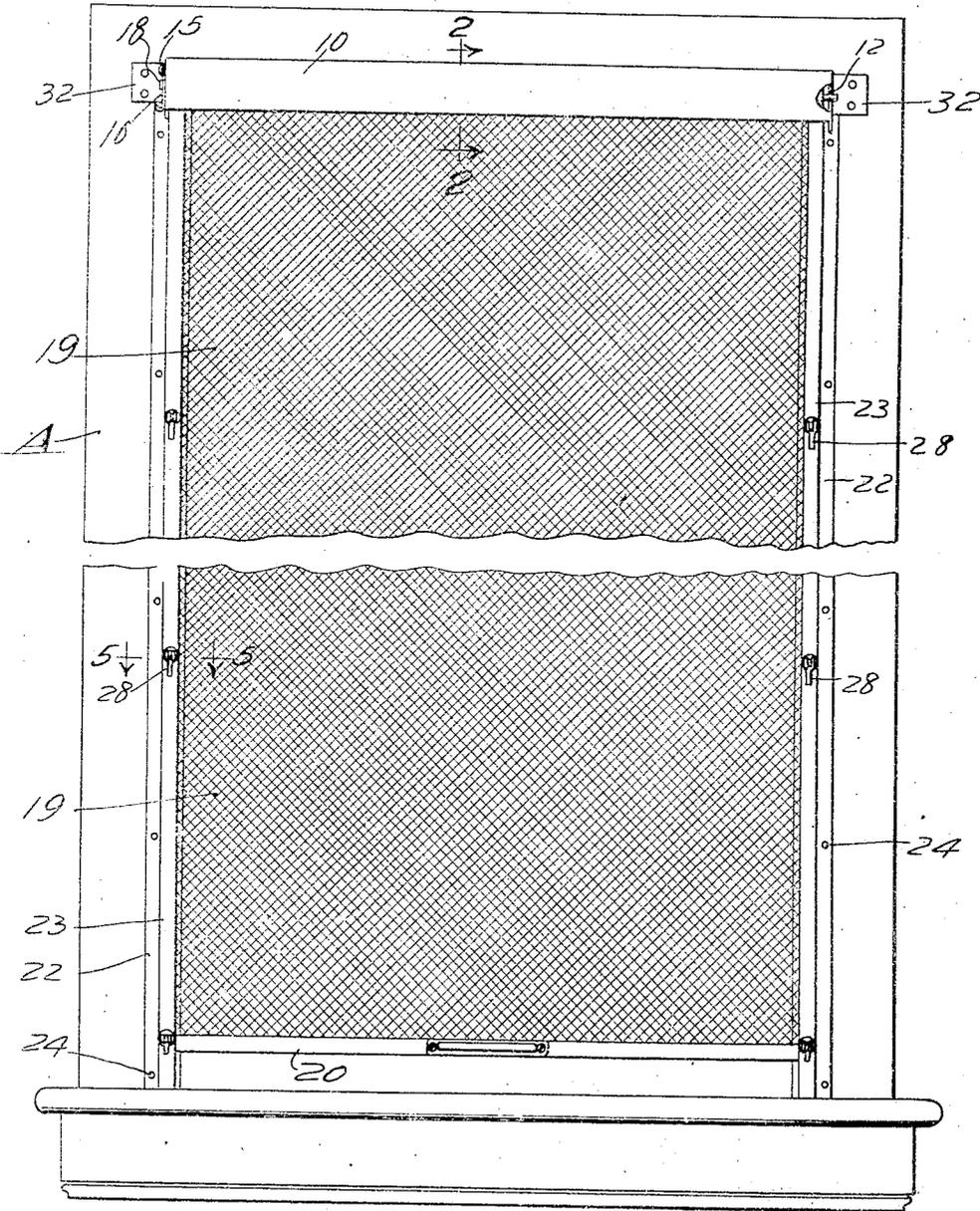


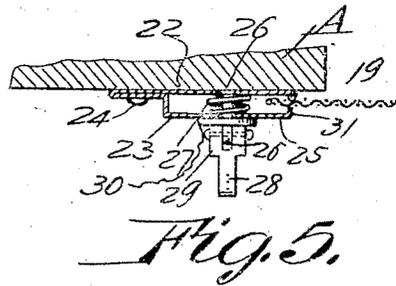
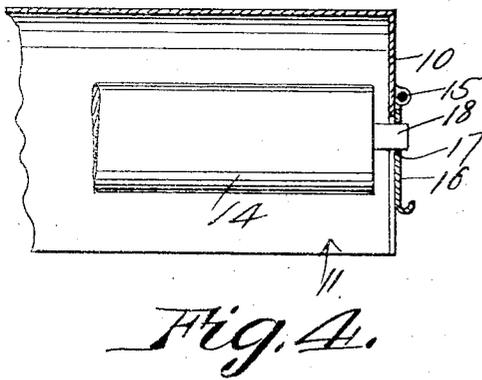
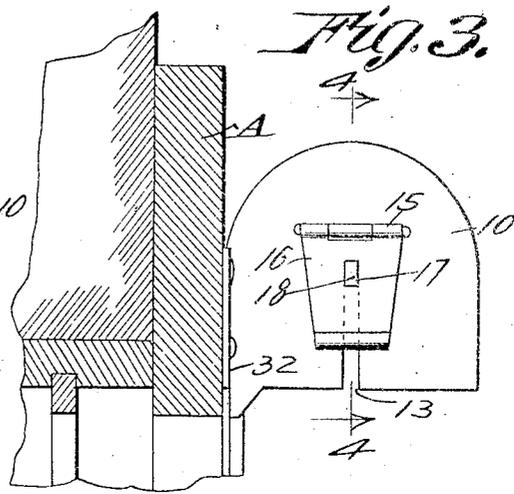
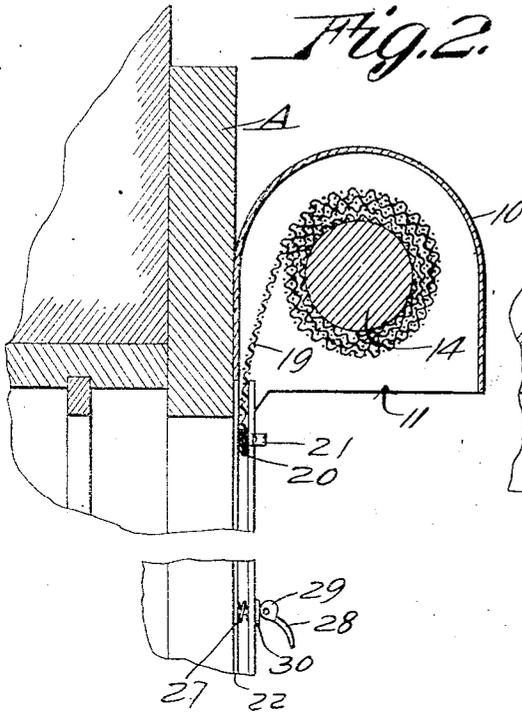
Fig. 1. *Bertha W. Jones,* Inventor

Calvert + Parker Attorneys

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UNITED STATES PATENT OFFICE.

BERTHA W. JONES, OF DICKINSON, NORTH DAKOTA.

WINDOW-SCREEN.

1,370,500.

Specification of Letters Patent.

Patented Mar. 1, 1921.

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To all whom it may concern:

Be it known that I, BERTHA W. JONES, a citizen of the United States, residing at Dickinson, in the county of Stark and State of North Dakota, have invented certain useful Improvements in Window-Screens, of which the following is a specification, reference being had therein to the accompanying drawing.

The invention relates to a window screen, and more particularly to the class of adjustable roller window screens.

The primary object of the invention is the provision of a screen of this character wherein the spring tensioned roller for the screen fabric is mounted within a housing at the head of the window casing and the screen fabric, when unwound therefrom, slides within cleats carried at opposite sides of the window casing so as to hold the screen fabric close to the window casing when being adjusted on the winding of the same upon and the unwinding thereof from the roller.

Another object of the invention is the provision of a screen construction of this character wherein the screen fabric can be clamped in the guide cleats therefor at opposite sides of the window when in lowered position so as to fasten the screen lowered.

A further object of the invention is the provision of a screen of this character wherein the construction thereof is novel in form and the same, when applied to the window casing, will be neat in appearance and will positively exclude flies and insects from entrance to an inclosure through the window.

A further object of the invention is the provision of a screen of this character which is simple in construction, thoroughly reliable and efficient in operation, strong, durable and inexpensive in manufacture and installation.

Other objects will be in part obvious and in part hereinafter set forth.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereinafter described, and the scope of the appli-

cation of which will be indicated in the appended claims.

In the drawings:

Figure 1 is a front elevation of a window casing showing the screen constructed in accordance with the invention applied;

Fig. 2 is a fragmentary vertical sectional view taken on the line 2-2 of Fig. 1;

Fig. 3 is an edge elevation;

Fig. 4 is a fragmentary sectional view on the line 4-4 of Fig. 3;

Fig. 5 is a sectional view on the line 5-5 of Fig. 1.

Similar reference characters indicate corresponding parts throughout the several views of the drawing.

Referring to the drawing in detail, A designates a window casing which is of the ordinary well known construction, and upon which is mounted the roller screen hereinafter fully described. The roller screen comprises a housing 10 preferably made from metal and is open on the under side thereof at 11 throughout the length of the same, while in one end of the housing is a hole 12 and in the opposite end is a slot 13, the hole and slot being designed to permit the insertion of the spring tensioned roller 14 within the housing 10 through the open bottom or under side 11 thereof, while on the slotted end of the housing is hinged at 15 a latch plate 16 which is formed with a slot 17 for receiving the trunnion 18 which controls the winding of the spring within the roller 14, which roller and its spring mounting are of the ordinary well known construction.

The roller 14 has fixed thereto one end of a wire mesh fabric 19 which constitutes the screen body, the opposite end being reinforced through the medium of a folded strip 20 which is secured thereto in any suitable manner. On the strip 20 is a loop handle 21 for convenience in the raising and lowering of the screen fabric on adjustment of the screen.

Fixed to the vertical stiles of the window casing A at opposite sides of the screen fabric 19 are guides, each comprising a base strip 22 which extends the full length of the vertical stile and a clamping strip 23

which is mounted on the base strip and secured in position relative thereto through the medium of fasteners 24 which are engaged in the vertical stile of the window casing for the mounting of the guides thereon. The clamping strip 23 is bent to form a substantially U-shaped portion 25 in cross section throughout its length and this portion coacts with the base strip 22 to form a cleat for receiving the side edge of the screen fabric 19 and also to serve as a clamp in a manner hereinafter fully described. For coaction with the clamping strip 23 at spaced intervals thereof are clamping devices, each comprising a pin 26 which loosely extends through the portion 25 of the strip 23, and surrounding this pin between the strips 22 and 23 is a coiled expansion spring 27 which serves to normally separate the portion 25 of the strip 23 from the base strip 22, and on the outer end of the pin 26 is pivoted a cam lever 28, the cam 29 of which works against a washer 30 loosely surrounding the pin and playing against the outer face of the portion 25 of the strip 23, and upon swinging the lever 28 inwardly the cam 29 thereof presses against the washer 30 for moving the portion 25 of the strip 23 inwardly against the resistance of the spring 27 so that the edge 31 of the portion 25 will grip the screen fabric 19 when it is unwound from the roller 14 or extended to lowered position, thereby locking the screen in such position.

The guides on opposite sides of the window casing A hold the screen fabric 19 close to the window casing and when the screen is in extended or lowered position it will exclude flies and insects from entrance through the window to an inclosure.

On releasing the cam lever 28 the spring 27 acts upon the strip 23 so as to move the same outwardly from the strip 22 and thereby open the cleat to permit the free travel of the screen fabric in the guides.

The housing 10, at the ends thereof, is formed with securing ears 32 through which are passed suitable fasteners for the fastening of the housing at the head of the window casing.

From the foregoing description, taken in

connection with the accompanying drawing, the construction and operation of the herein described window screen will be readily apparent and, therefore, a more extended explanation has been omitted.

Having thus described my invention, I claim:

1. In a window screen, a housing open at its under side and having a hole in one end and a slot in the opposite end, a spring tensioned roller having its round trunnion engaged in said hole and its spring engaging trunnion entering said slot, a latch plate hingedly mounted on the slotted end of the housing and formed with a hole which the spring engaging trunnion enters, whereby said plate may be swung away from the end of the housing to release said trunnion and thereby permit the roller to be removed from the housing, and a fabric carried by the roller.

2. In a window screen, a housing designed for mounting at one end of a window frame, a spring actuated roller carried in said housing, a reticulated fabric carried on the roller and capable of being wound upon or unwound therefrom, and guides for the side edges of the fabric, the said guides being designed for mounting on the vertical stiles of a window frame and comprising each a base strip extending the full length of the stile, a clamping strip carried by the base strip, the clamping strip being bent to form a portion substantially U-shaped in cross section throughout its length, this portion co-acting with the base strip to form a cleat for receiving the side edge of the fabric, a pin fixed to the base strip and passing loosely through the said U-shaped portion of the clamping strip, a spring in surrounding relation to this pin and positioned between the base strip and the said U-shaped portion, and a cam lever pivotally attached to the outer end of the pin and having its cam element bearing against the outer face of the said U-shaped portion, whereby the clamping strip may be forced toward the base strip to effect a clamping engagement with the side edge of the fabric.

In testimony whereof I affix my signature.
BERTHA W. JONES.