

No. 862,989.

PATENTED AUG. 13, 1907.

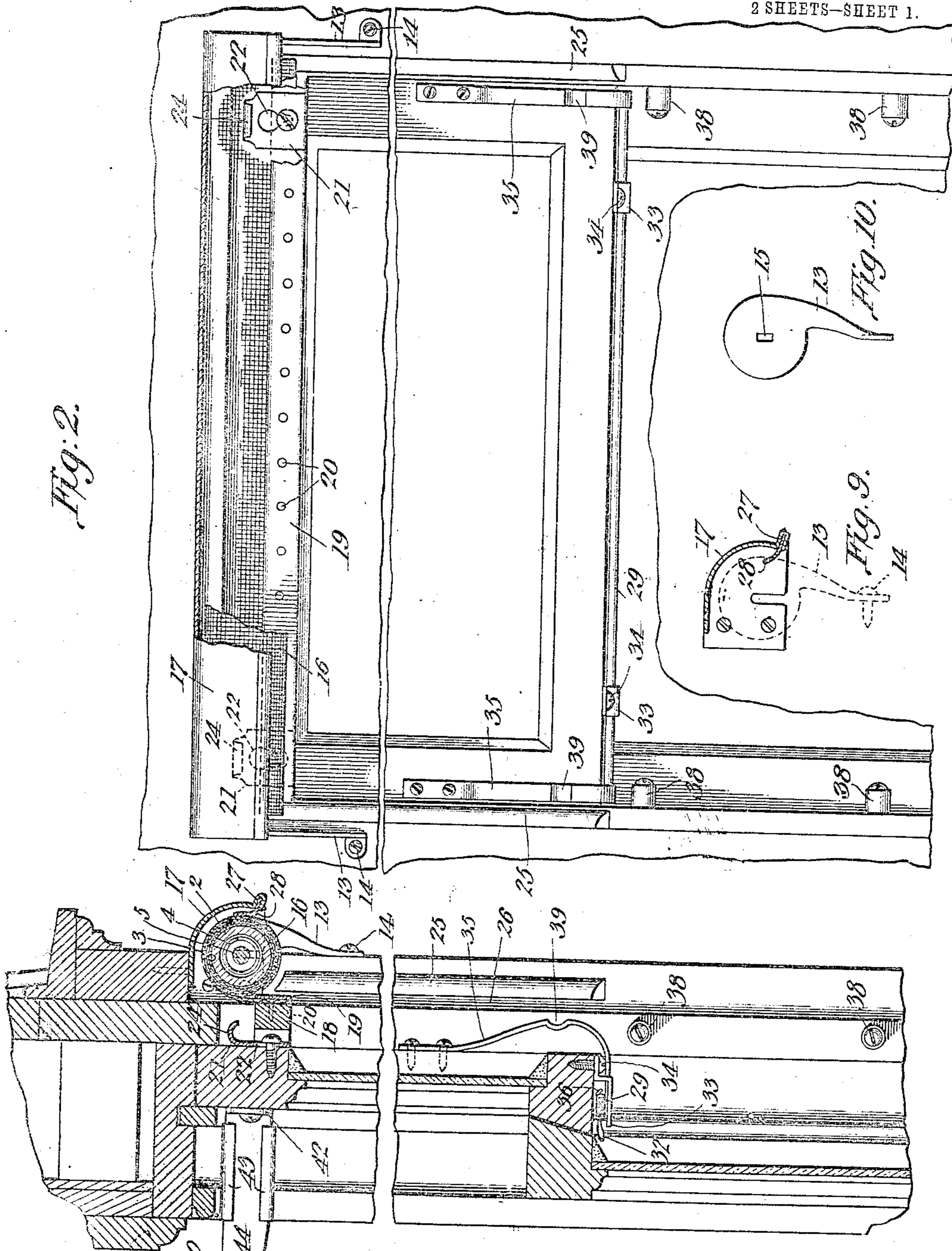
J. NYE.

WINDOW SCREEN.

APPLICATION FILED AUG. 16, 1906.

2 SHEETS—SHEET 1.

Fig. 2.



Witnesses:  
J. D. Knapp,  
G. J. Belton

Fig. 1.

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WINDOW SCREEN.

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DESCRIPT-SHEET 2.

Fig. 3.

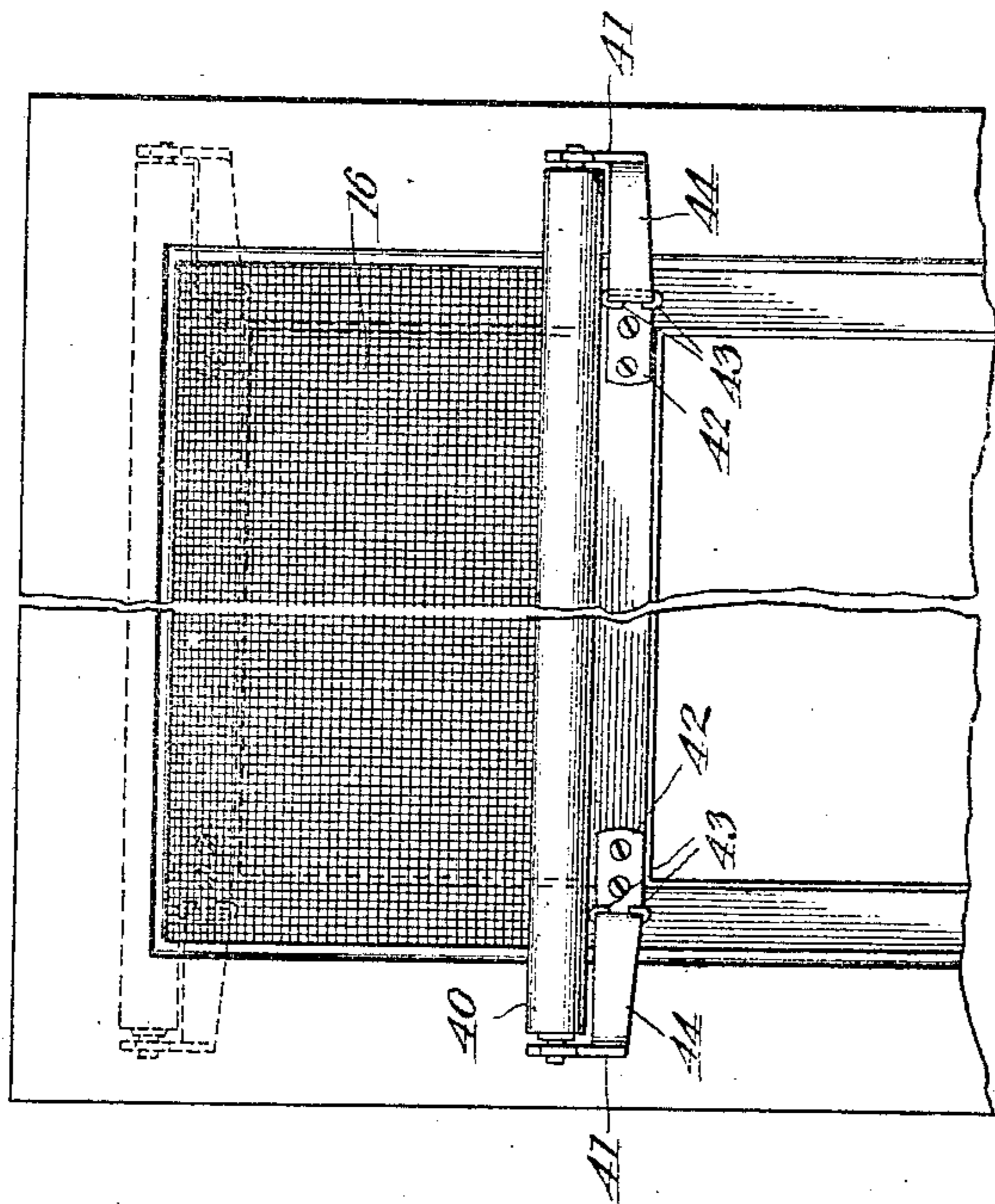


Fig. 6.

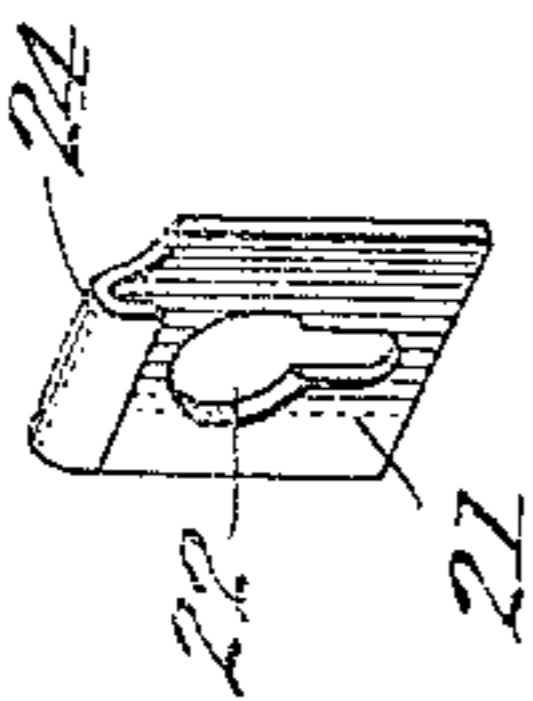


Fig. 5.

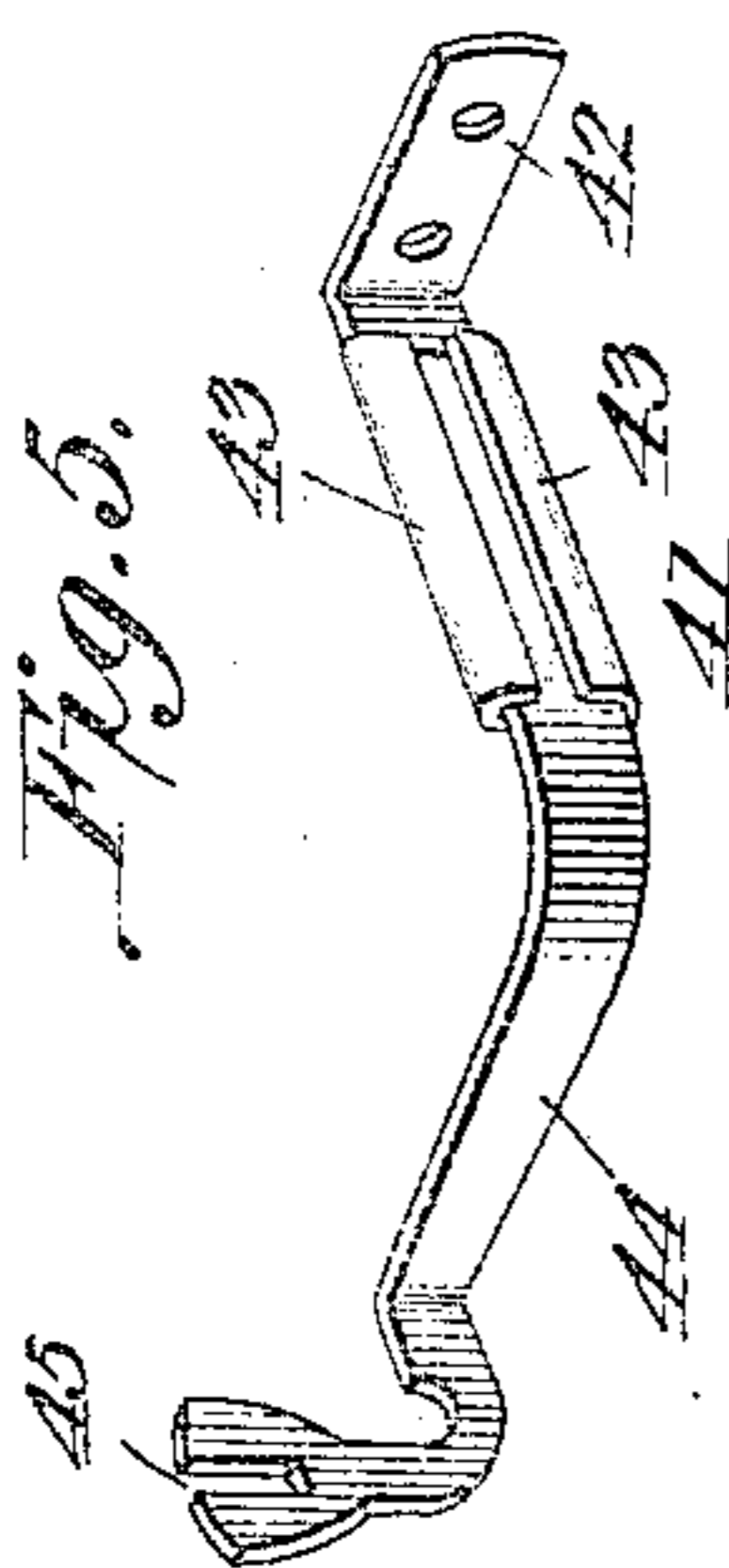


Fig. 7.

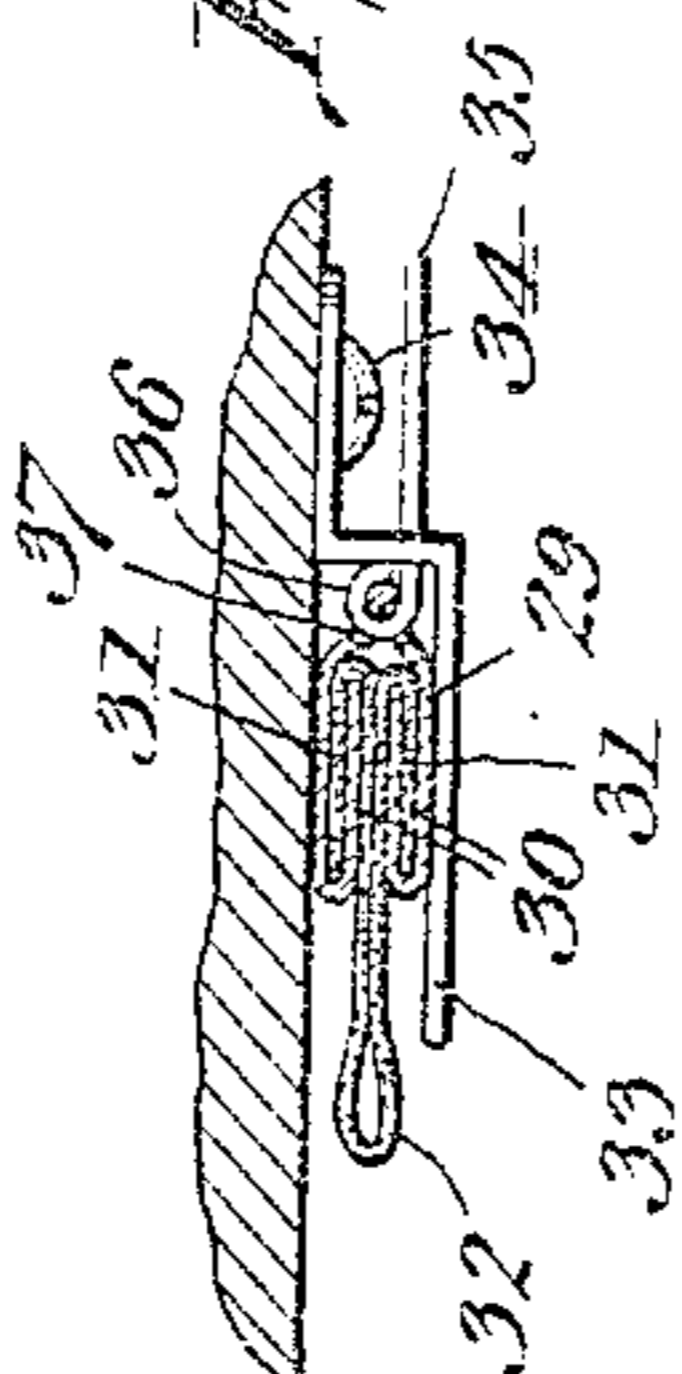


Fig. 8.

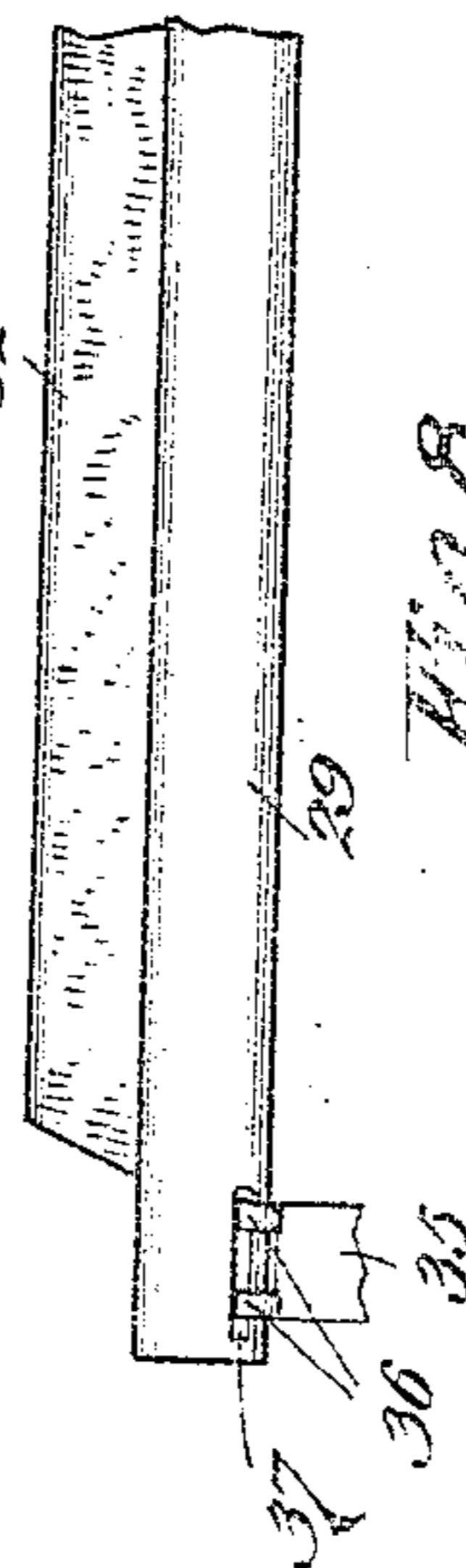
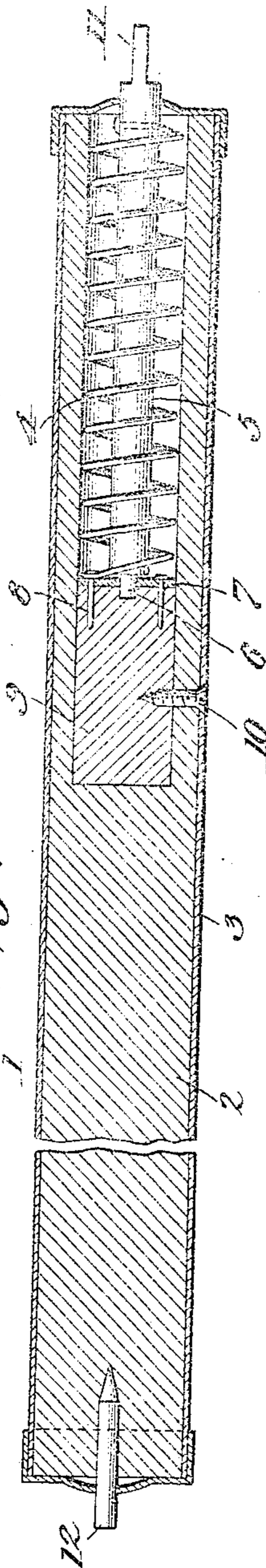


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JOHN NYE, OF MONTPELIER, OHIO.

## WINDOW-SCREEN.

No. 862,989.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed August 16, 1906. Serial No. 330,901.

To all whom it may concern:

Be it known that I, JOHN NYE, a citizen of the United States, residing at Montpelier, in the county of Williams and State of Ohio, have invented certain new and useful Improvements in Window-Screens; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to window screens, and has for its object to provide a construction in which the screen will be connected to the top sash so as to be drawn down with the lowering of the sash, thus affording a complete ventilation from the top without the possibility of flies or insects entering the room, the top sash also carrying with it the inside curtain so that it will afford no obstruction to the free passage of air above the sash when lowered.

It has also for its object to provide for locating the screen and its roller outside of the window and to provide a shield or cap therefor which will be so constructed as not only to cover the screen and roller and thus protect it from the weather but also prevent any flies or insects from finding an ingress into the room through the space left by unwinding the screen.

It has also for its object to provide for the easy attachment of the screen to the sash and its ready detachment therefrom.

It has also for its object to provide efficient means for preventing flies and insects from finding a passage-way into the room through the space between the two sashes when the meeting rails are separated by drawing down the top sash.

To the accomplishment of the foregoing and such other objects as may hereinafter appear the invention consists in the features of construction and in the combination of parts hereinafter particularly described and then sought to be clearly defined by the claims, reference being had to the accompanying drawing forming a part hereof, and in which

Figure 1 is a vertical section through the window frame, cornice and sash, and my invention applied; Fig. 2 a front elevation of the same, with parts broken away; Fig. 3 a front elevation showing the top sash lowered with the screen covering the opening; and the curtain roller and its brackets shown in full lines, and also in dotted lines; Fig. 4 a longitudinal section of the screen roller; Fig. 5 a perspective of one of the curtain roller brackets; Fig. 6 a perspective of one of the screen-strip plates; Fig. 7 a cross section through

the fly slide and a portion of the meeting rail of the top sash; and Fig. 8 a plan view of a portion of the fly slide.

In the drawing, the numeral 1 designates a spring roller of any suitable construction but preferably consisting of a wooden core 2 having a metal sheathing 3 and in one end of which is contained a spiral spring 4 coiled around a stem 5 having a pintle 6 at one end journaled in a plate 7 held by screws 8 to a plug 9 secured in place by a screw 10, the opposite end of the stem having a flat or angular pintle 11 to engage with one of two supporting brackets, the other end of the roller having a pintle 12 to engage the other supporting bracket. The brackets are indicated by the numerals 13 which are held by screws 14 to the sash casing, one of said brackets having an angular shaped opening 15 to receive the angular shaped pintle of the roller and the other bracket an open slot to receive the pintle at the opposite end of the roller. The roller carries a screen netting 16 of wire or other suitable material, and it is protected from the weather by a cap 17 preferably of sheet metal secured along its upper edge as well as its ends to the casing and covering the ends of the roller as well as the otherwise exposed portion thereof.

The working end of the netting is attached to a wooden strip 18 by means of a tongue 19 fitting in a groove 20 formed in said strip, and the strip is provided with plates 21 formed with openings 22 to receive headed screws which hold the strip to the top rail of the upper sash, said plates having outturned ends 24 to be grasped by the hand from inside of the room for the purpose of connecting or disconnecting the strip to and from the sash. Strips 25 are secured to the outside of the casing so as to form guide-ways or grooves 26 for the edges of the screen netting to work in. For the purpose of closing the space between the screen roller and the weather cap to prevent flies and insects from entering the room through such space, the edge of the weather cap is formed with a groove 27 in which fits a rubber strip 28 which projects inwardly and bears against the screen roller as seen in Fig. 1.

For the purpose of preventing flies and insects entering through the space between the lower sash and the top sash when the latter is lowered, I provide a slide 29 formed preferably of a folded strip of metal having inturned ends 30 clamping inturned ends 31 of a folded strip of rubber 32, which slide is supported on the under side of the meeting rail of the top sash by supports 33 secured by screws 34 to said rail. This slide is connected to the ends of bowed springs 35 attached by screws or otherwise to the side rails of the top sash, the connection between said springs and slide prefer-

ably being a loose connection, for instance, by having prongs 36 at the ends of the springs passing through elongated slots 37 in the slide so that the slide may have a slight longitudinal movement to allow for slight side movement of the sash and may also have a more or less tilting movement when pressed inwardly by the springs. The springs normally hold the slide in the position shown in Fig. 1, but when the top sash is lowered the springs come in contact with friction rollers 38 secured to the blind stop of the window and by them are pressed inward so as to move the slide forward and bring its rubber edge in close contact with the glass of the lower window sash, thus closing the space and preventing the possibility of flies or insects finding an entrance into the room at such points. Each spring is preferably formed with a depression 39 to receive the anti-friction rollers 38 so as to hold the spring and slide in their projected position.

For the purpose of moving the inside shade or curtain with the top sash in order that the air may have a free passage through the screen as the top sash is lowered, I support the curtain roller 40 on adjustable brackets 41 formed of angle plates 42 having one member formed with intumed edges 43 forming a way in which slides arms 44, said arms being bent laterally as shown at *a* and then at right angles thereto and then upwardly as shown at *b* the upturned portions being formed with sockets 45 to receive the pintles or journals of the roller. This construction allows the brackets to be adjusted outwardly or inwardly so as to bring the roller nearer to or farther from the window frame as desired, while at the same time the curtain is raised and lowered with the sash.

Under the construction described, as the top sash is lowered it carries with it the window curtain and at the same time draws down the screen to cover the opening above the sash while at the same time the fly slide is projected against the glass of the lower sash, all of which actions are obtained simultaneously and during the movement of the top sash.

The screen roller being located outside of the window simplifies the construction and avoids alterations being made in the interior construction of the window frame and also leaves the window with its ordinary appearance on the inside of the room.

Having described my invention and set forth its merits, what I claim is:—

1. The combination with the upper window-sash, of a spring roller located outside of the window and provided with a screen attached at one end to the top of the sash, a fly slide connected with the bottom rail of the sash and adapted to be projected against the glass of the lower sash as the upper sash is lowered and the screen moved over the window opening in the operation of lowering the upper sash, said fly slide being normally out of contact with the glass of the lower sash, and means in the path of movement of said slide to project the slide in lowering the sash, substantially as described.

2. The combination with the upper window-sash, of a housing at the top of the window, a spring roller within the housing and provided with a screen attached at one end to the top of the sash, and a flexible guard attached to the roller housing at its lower outer edge and extending inwardly and upwardly to bear against the screen to cover the space between the roller and its housing, substantially as described.

3. The combination with the upper window sash, of a spring roller located outside of the window, a screen mounted on said roller and secured to said upper sash, a weather cap covering said roller and having an open slot formed in one end thereof to receive the pintle of the roller, and brackets supporting said roller, one of the brackets being removable and having the roller pintle extending through it and fitting in said slot, substantially as described.

4. The combination with the upper window-sash, of a fly-slide consisting of a sliding bar supported beneath the bottom rail of the top sash and having a projecting flexible strip along its edge, and springs connected with said slide and normally holding it in a retracted position, and projections in the path of said springs adapted to project the slide to move the flexible strip of the slide into contact with the glass of the lower sash in the downward movement of the upper sash, substantially as described.

5. The combination with the upper window-sash, of a fly-slide consisting of a folded metal strip clamping a folded rubber strip and slidably supported beneath the bottom rail of the upper sash, bowed springs attached to the sides of the sash and connected to said slide, and projections on the sides of the window-frame in the path of travel of said springs to project said slide and move its flexible strip into contact with the glass of the lower sash in the downward movement of the top sash, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN NYE.

Witnesses:

I. W. PRESSLER,  
JOHN G. FRIEND.