

(No Model.)

2 Sheets—Sheet 1.

J. HARRIS.
WINDOW SCREEN.

No. 550,412.

Patented Nov. 26, 1895.

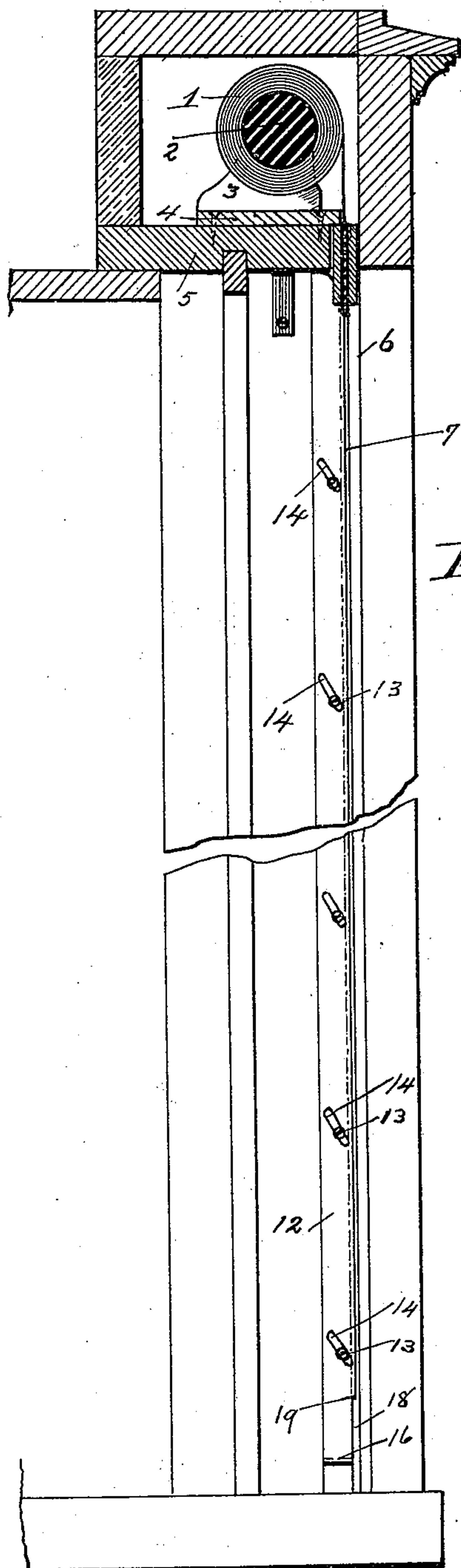
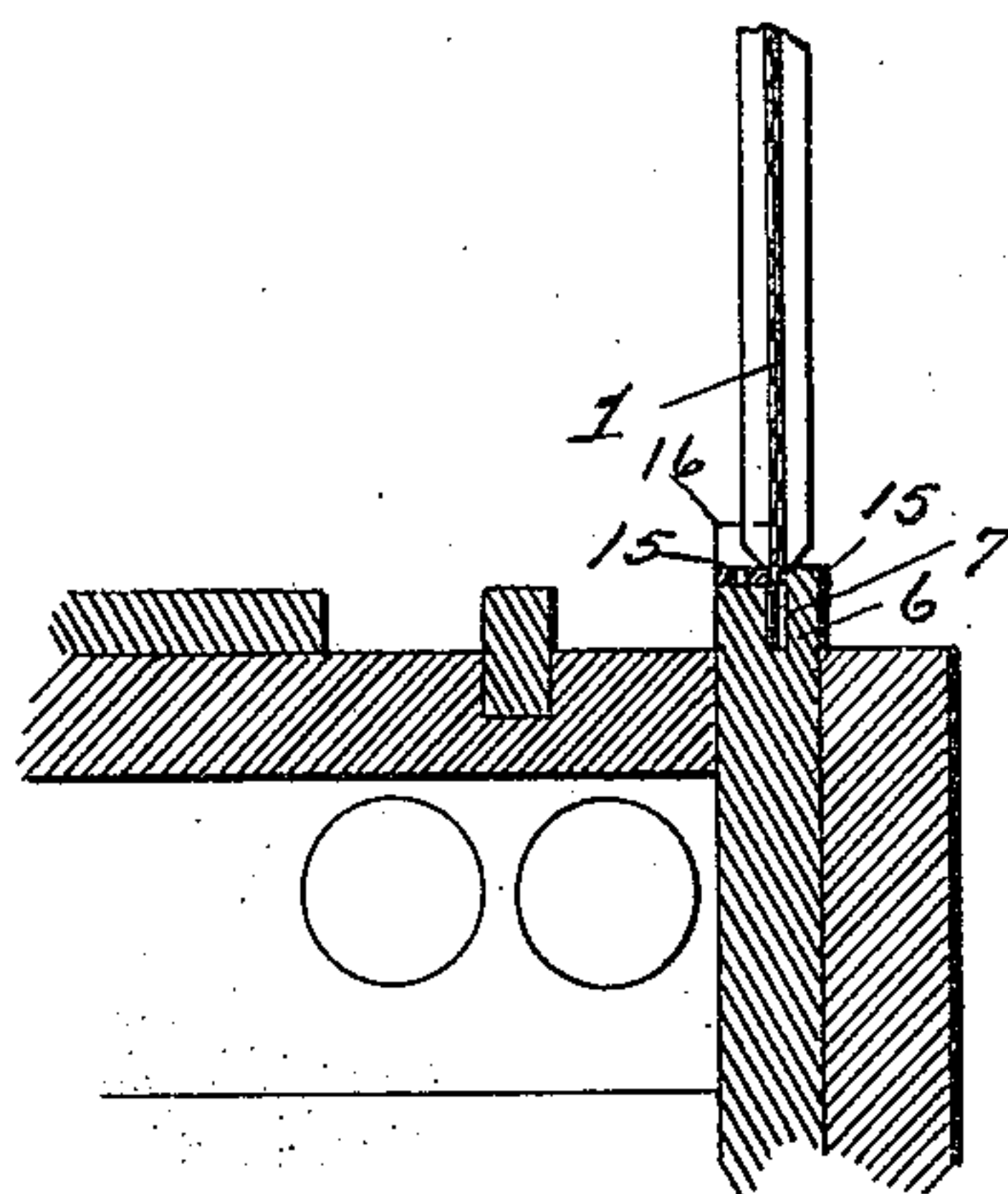


Fig. 1

Fig. 2.



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Fig. 5.

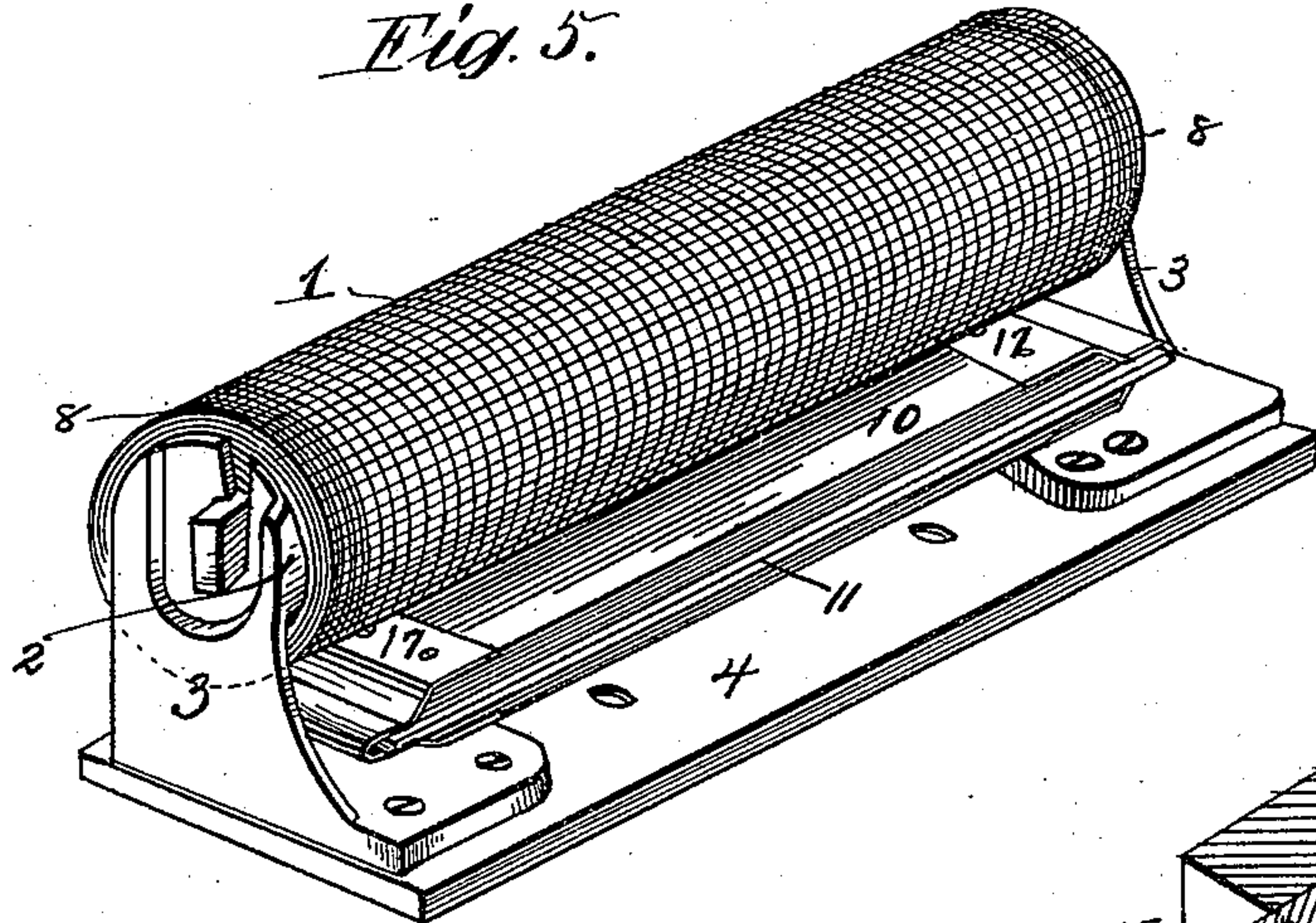


Fig. 3.

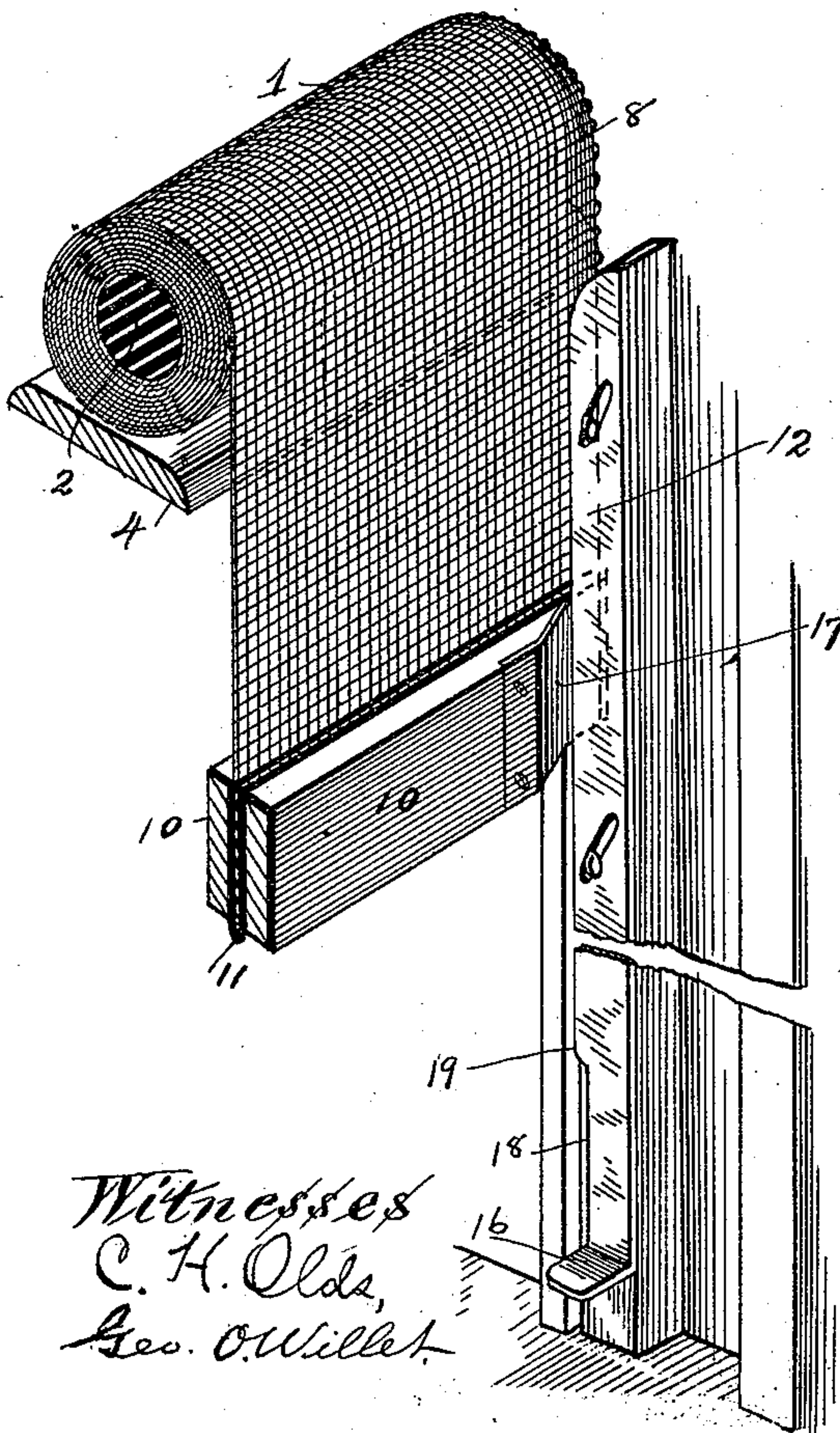
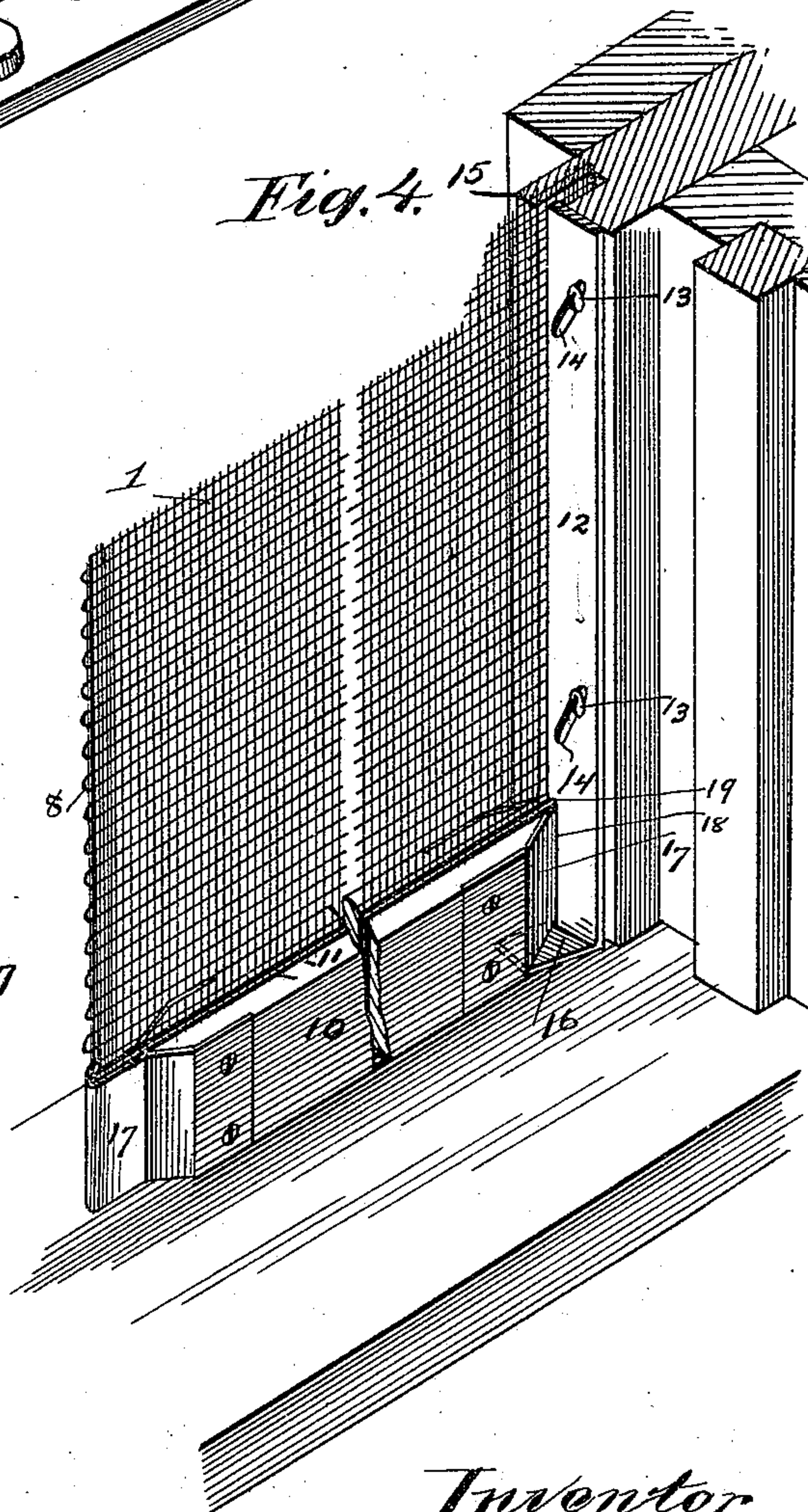


Fig. 4.



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UNITED STATES PATENT OFFICE.

JONATHAN HARRIS, OF CLEVELAND, OHIO, ASSIGNOR TO GEORGE W. REID,
OF SAME PLACE, AND B. L. MARBLE, OF BEDFORD, OHIO.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 550,412, dated November 26, 1895.

Application filed March 25, 1895. Serial No. 543,174. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN HARRIS, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Window-Screens, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in window-screens and attachments; and the objects of the invention are to provide a window-screen which can be automatically secured at any point of the sash at pleasure and can be rolled into compact shape for shipment.

My invention consists in the detachable roller-bearings and in the movable side clamps with the arrangement of parts and construction of details as hereinafter described, shown in the accompanying drawings, and more specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical transverse section through window and upper casing. Fig. 2 is a horizontal section through upper casing. Fig. 3 is a perspective view of one of the side window-casings and a portion of the roll of screen-netting. Fig. 4 is a view of the lower part of the same casing and a portion of sill. Fig. 5 is a view of the detached roller and mounting.

In the views 1 is the netting rolled upon a spring-roller 2 in the usual manner of a window-shade.

3 are the brackets for the roller secured to a plate 4, detachably secured to the transverse bar 5 of the window-casing, so that by removing this bar the roller can be easily detached.

The outer window-stops 6 are vertically slotted at 7 to admit and guide the sides 8 of the wire-netting, which are preferably reinforced by additional strands where they enter the slot.

The lower edge of the netting is strengthened by means of bars 10 on either face securely fastened together, and an inner lining on either side 11, of rubber, grips the netting and prevents tearing the edge.

In order to secure this curtain when at the bottom, the metallic strip 12 is employed, se-

cured to the face of the vertically-slotted stop 6 on one side of the slot 7 by means of pins 13 inserted in diagonal slots 14. The opposite side of the slot is extended, so that it presents a bearing-edge 15, against which the metallic strip will press the edge of the netting when forced against it. This will be automatically accomplished by means of the lug 16 projecting from the lower end of the metal strip which the bars 10 engage and press downward, while the pins 13 in the diagonal slots drive the metal strip against the netting and so retain it in frictional contact with the extended side of the stop 15. By pulling down upon the lug 16 the metal strip can be made to bind the netting at any elevation required when it is not necessary to use the whole curtain.

As shown in Fig. 5, the netting can be packed mounted with its roller and brackets upon the plate 4, so as to be in condition for immediate use.

The ends of the bars 10 and lower edges of the netting are reinforced by the metal plates 17, which enter the slots at their narrower portions.

It will also be seen that the metal strips press against the whole exposed portion of the netting, and in this manner a slight pressure will obtain a great frictional resistance.

The angle of the slots should be sufficiently great to insure adhesion of the pins when the strips are drawn down.

At 18 is seen a recess in the lower end of the metallic strip 12, into which the bars 10 will insert themselves as soon as they are pulled down. It will then be seen that the projecting upper edge of the recess at 19 will be engaged by the bars in rising and so pull up the metal strips again, and the pins 13 will throw them out again from engagement with the screen.

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

1. In combination with a window screen, vertically slotted window stops in which the edges of said screen travel, one edge of said slot being extended to form a bearing, metal plates diagonally slotted and secured to the faces of said stops by pins, a bar reinforcing

the lower edge of the screen, provided with metallic extremities, and lugs on the lower edges of the slotted plates, adapted to be engaged, by the ends of said bar and automatically force the plates against the screen and stop extensions, when the screen is lowered, substantially as described.

2. The combination with a window screen, of a window casing provided with vertically slotted window stops, in which the edges of the screen travel, the further portions of the slotted stops being extended to form a bearing for the screen, diagonally slotted metallic plates on the faces of said stops, lugs at the lower extremities of said plates, a lower bar for the screen reinforced by metallic extremities, adapted to engage said lugs and automatically force the plates against the screen, and recesses at the lower edges of the plates

adapted to receive the ends of the bar when down, substantially as described, and for the purpose set forth.

3. In a window netting, reinforced edges for the same, consisting in multiple strands closely woven to form sides therefor, and wooden bars at the lower edge of the netting secured on either side, rubber strips adjacent to the netting, and metallic tips for the bars, narrowed at their outer extremities as and for the purpose set forth.

Signed at Cleveland, county of Cuyahoga, State of Ohio, this 15th day of March, 1895.

JONATHAN ^{his} × HARRIS.
mark

Witnesses:

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GEO. O. WILLET.