

No. 754,771.

PATENTED MAR. 15, 1904.

H. B. HIGGINS.
HANGER FOR HALF SIZED SCREENS.
APPLICATION FILED APR. 15, 1903.

NO MODEL.

Fig 2

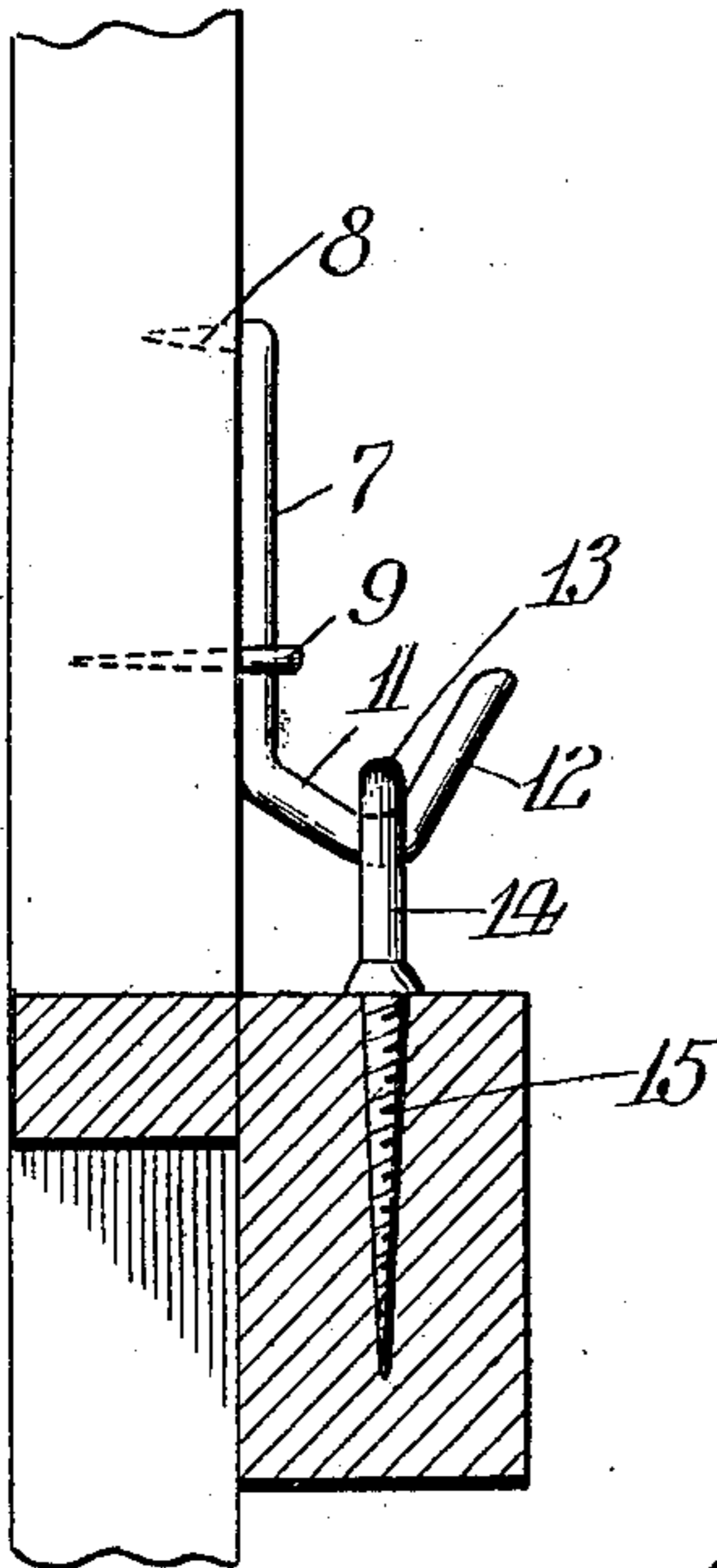


Fig. 1

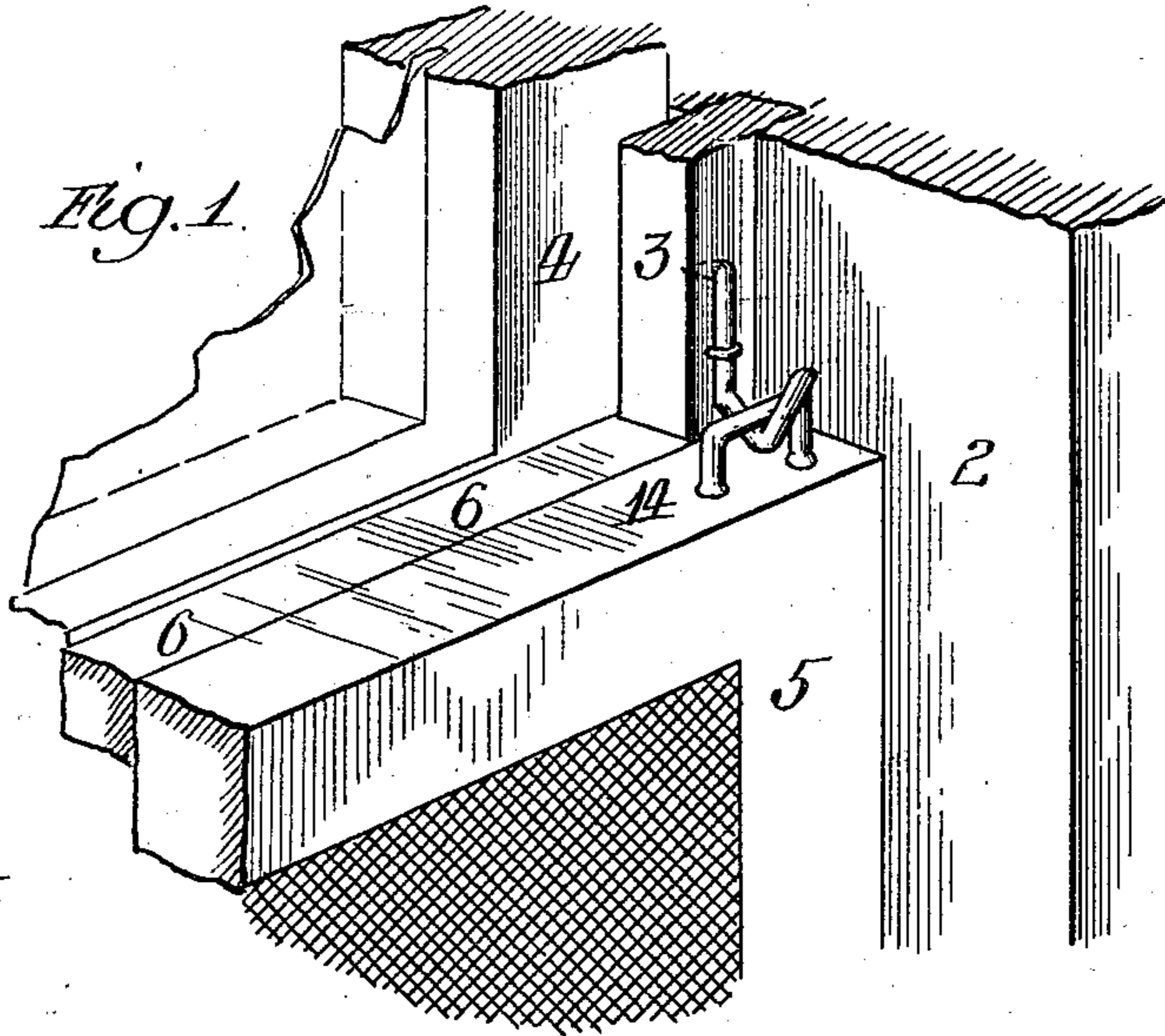


Fig. 3

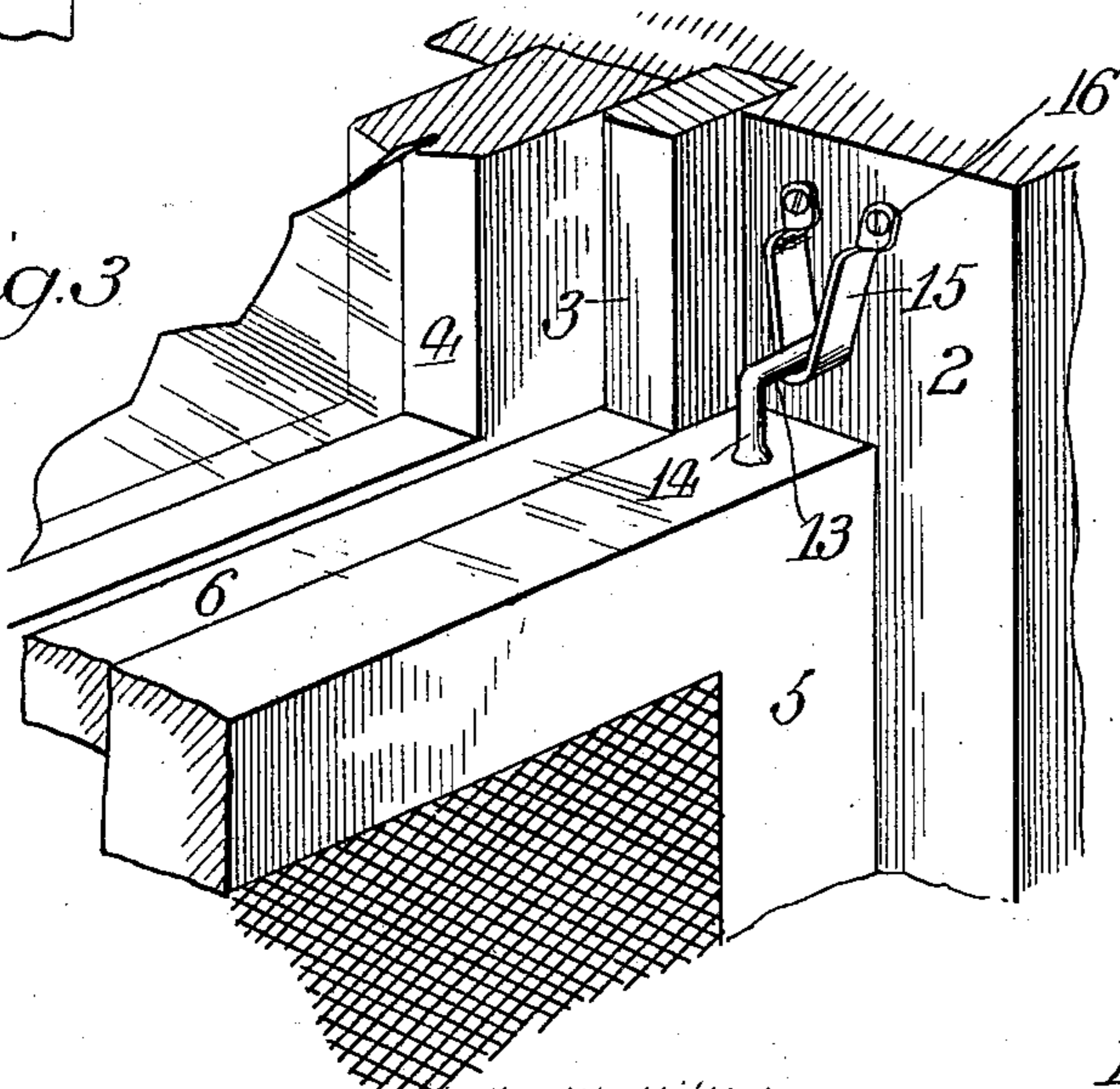


Fig 4

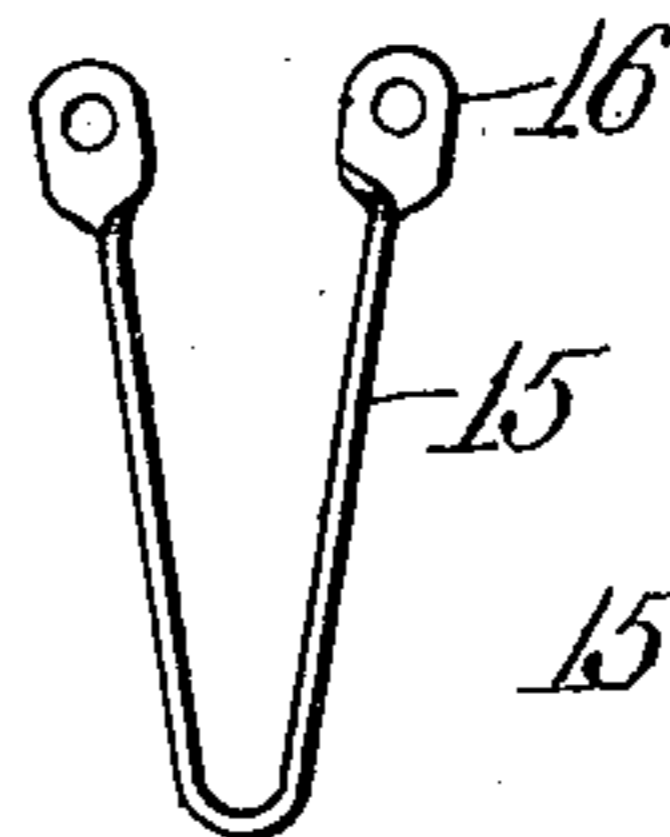


Fig 5

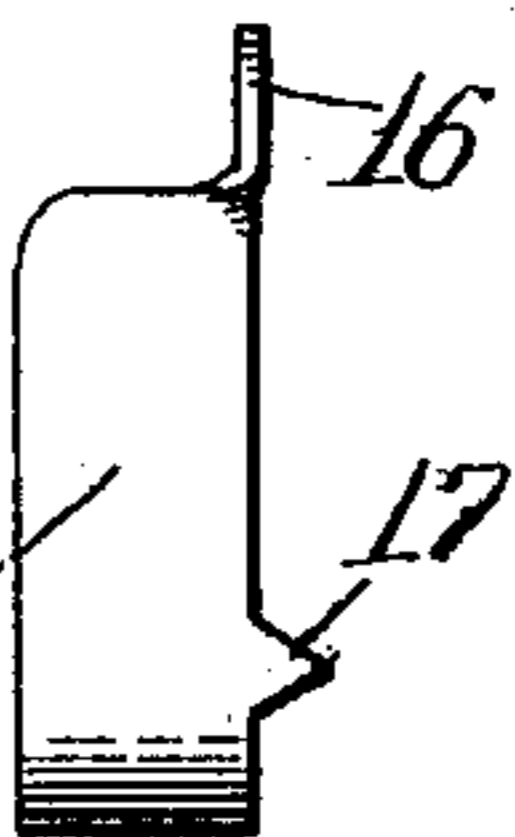
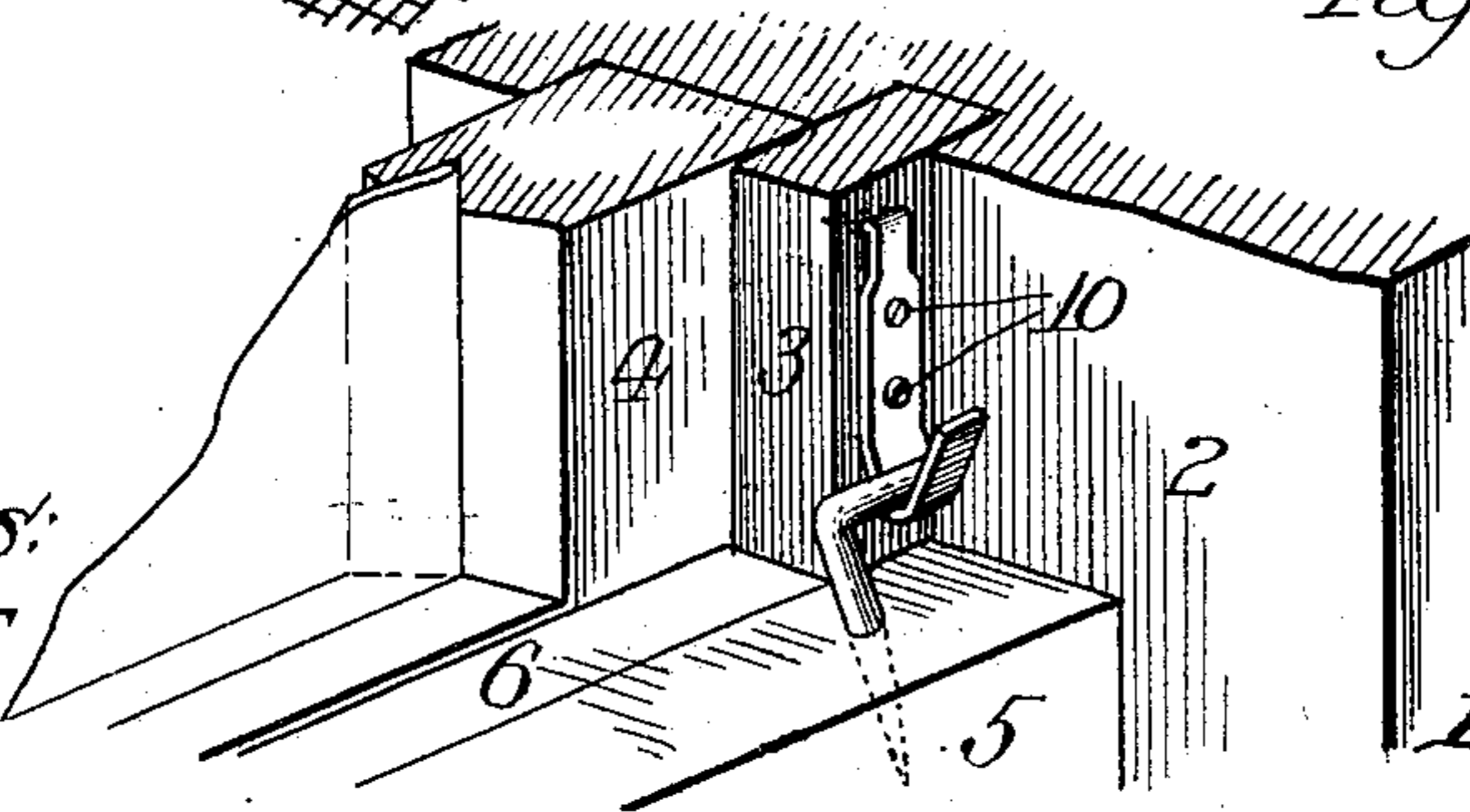


Fig 6



Witnesses:
H. B. Higgins
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Inventor
Henry B. Higgins

By O. Hawley

UNITED STATES PATENT OFFICE.

HENRY B. HIGGINS, OF DENVER, COLORADO.

HANGER FOR HALF-SIZED SCREENS.

SPECIFICATION forming part of Letters Patent No. 754,771, dated March 15, 1904.

Application filed April 15, 1903. Serial No. 152,732. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. HIGGINS, a citizen of the United States, residing at Denver, Denver county, Colorado, have invented certain new and useful Improvements in Hangers for Half-Size Screens, of which the following is a specification.

My invention relates to means for hanging and fastening window-screens, and has particular reference to fasteners or hangers for use with half-size screens, whether the screens are placed against or between the window-blind stops.

My invention relates particularly to that class of fasteners which comprise hinged parts by which a hinge or pivotal connection is made between the window-frame and the top of the screen, so that the lower end of the screen may be swung outwardly to open the window. The screens which are thus equipped are usually fastened at the bottom by means of a hook or catch, which is supposed to prevent the accidental pushing out of the screen; but so far as I am informed no fastening has yet been devised which successfully locks the screen against vertical movement while in its normal position. It is proper that this function should be performed by the hinge-fastening or hanger itself; and the object of my invention is to provide a screen-hanger by which the screen may be pivotally hung in the window-frame with all the advantages and conveniences of such arrangement and which hanger will interfere with and prevent the vertical movement of the screen except when the screen is swung out to a certain position or inclination.

Another object of my invention is to simplify the construction of screen-hangers and lessen the cost of manufacturing the same; and another object which I have in view is to provide a hanger or pairs of hangers that may be applied by an unskilled person and which after being applied to the window and screen may, if necessary, be easily and quickly adjusted to correct any inaccuracy that may have occurred in the placing of the parts.

Still another object of my invention is to provide a hanger which may be used on either side of the window-frame, thereby avoiding

the necessity for and expense of right and left hand hangers.

Another and particular object of the invention is to provide a hanger that shall be adapted for attachment to any part of the window-frame or of the window-sash that is parallel with the plane of the screen, so that if special security is desired the connection may be made between the upper window-sash and the screen, in which case the screen when fastened at the bottom will serve to prevent the lowering of the upper window-sash.

My invention consists in a window-screen hanger, attachment, or support comprising a loop that is secured to the window or window-frame and closely overhangs the top of the screen, in combination with a hook or pintle on the screen and which hangs in said loop.

My invention also consists in details of construction and combinations of parts, all as hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of portions of a window frame and screen equipped with a hanger that embodies my invention. Fig. 2 is an enlarged view of the hanger. Fig. 3 is a perspective view showing a modified form of the pivot-loop. Figs. 4 and 5 are edge and side views of said pivot-loop, and Fig. 6 is a perspective view illustrating still another form of the loop and the manner of its use.

As shown in the drawings, 2 represents the window-frame. 3 represents the blind-stop. 4 represents the upper window-sash. 5 represents the screen-frame, and 6 represents the filling-strip that is attached to the screen-frame and closes the opening which would otherwise exist between the upper rail of the screen-frame and the mid-rail of the window-sash. It will be noted that the screen is placed or lies against the outer side of the blind-stop. This is the usual arrangement when new screens are made for windows; but when the screens are narrower and are placed between the opposite blind-stops, the filling-strip is dispensed with. My hanger is adapted for

use in either of these cases, though I have preferred to illustrate same only in connection with screens of full width, this being the preferable construction.

5 The improved hanger in all of its forms comprises a pivot-loop for attachment to the window-frame or the window-sash and which is opened at the top in combination with a pintle that is secured in the screen. In placing the
10 screen in position the pintle is dropped into the loop, the screen at that time being held out at an angle. After the pintle is entered the screen is lowered to a vertical position and its top is swung beneath the overhanging loop,
15 which thereafter serves as a stop to prevent vertical movement of the screen.

The preferred form of the loop portion of my device is shown in Figs. 1, 2, and 6. It is hook-like and may be made of either round,
20 square, or flat metal. Whatever its form in cross-section its shank or straight portion 7 terminates in a sharp point 8 at right angles to the shank, which is driven into the blind-stop or the window-sash and carries the
25 weight of the screen. The shank is additionally fastened by a staple 9, that straddles the shank, or if the shank is flat it may be secured by one or more nails or screws 10. (See Fig. 6.) At its lower end the loop has a
30 sharp outward bend 11, and this terminates in the upwardly-projecting inclined portion 12. It will be seen that this lower portion of the loop overhangs the top of the screen 5. It is thus made to serve as a stop that prevents the
35 lifting of the screen to such an extent as to disengage the pintle 13 from the loop. Said pintle 13 is a portion of a screw-eye or screw-hook or staple 14, the shank 15 of which is driven into the top rail of the screen-frame.
40 The pintle or cross-bar portion of the hook or staple is parallel with the top of the screen, so that it may slide in the loop. This is the case whether the shank of the pintle is driven straight into the screen, as shown in Figs. 1
45 and 2, or is inclined, as shown in Fig. 6. The arrangement of the pintle-hook is governed by the location of the loops on the window-frame and may be corrected by turning the pintle-hooks up or down in the screen-frame,
50 giving my invention a distinct advantage over other hangers.

To adapt my hanger for attachment to side faces of either the window-frame or the blind-stop, I sometimes make the loop, as shown in
55 Figs. 3, 4 and 5. Here it takes a V form and is preferably made of a comparatively wide band 15. The upper ends are flared or bent to form the ears 16 to receive the nails or screws 13, by which the loop is fastened to

the window-frame or to the blind-stop. The
60 lower portion of the loop has sharp points or spuds 17, that are driven into the wood and prevent the displacement of the loop when pressure is exacted against the inner side of
65 the screen. It will be observed that the loop presents a steep incline to the pintle, which bends to slide down the same, thus causing the screen to hug tightly against the stops 3.

As various modifications of my invention will readily suggest themselves to one skilled
70 in the art, I do not confine my invention to the specific constructions herein shown and described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—
75

1. The combination of the window-frame and the blind-stops thereof, with the screen arranged in said window-frame and against the outer sides of said blind-stops, a screen hanger or support arranged closely above the
80 top of the screen at each edge thereof to prevent the lifting of the screen vertically while it is in place against said blind-stops, each said hanger comprising a loop that is open at the top and which is provided with a steep
85 outer side or end for engagement by a pintle on said screen and whereon said pintle tends to slide downward and thereby thrust the screen closely against the blind-stops, substantially as described.
90

2. A separable screen hanger or hinge member comprising the open-topped hook or loop that is composed of the straight portion or shank 7, the driving-spud arranged at the end thereof, and the hook-forming portions 11
95 and 12, the latter occupying an acute angle, with respect to the shank 7, substantially as described.

3. A separable hinge for half-size screens comprising the upper part or loop composed
100 of the shank 7, the spud 8, and the portions 11 and 12, the latter occupying an acute angle with respect to the shank 7, in combination with a pintle comprising a shank and a
105 pintle proper, at right angles thereto, said upper part being adapted for attachment to a window-blind stop, and said pintle being adapted for attachment to the top of a screen, substantially as described.

In testimony whereof I have hereunto set my
110 hand, this 7th day of April, 1903, in the city and county of Denver, Colorado, in the presence of two witnesses.

HENRY B. HIGGINS.

Witnesses:

WILLIAM H. STEWART,
JULIA B. TRENWITH.