

No. 656,633.

Patented Aug. 28, 1900.

E. R. DUTTON.
STORM SASH FASTENER.

(Application filed Dec. 11, 1899.)

(No Model.)

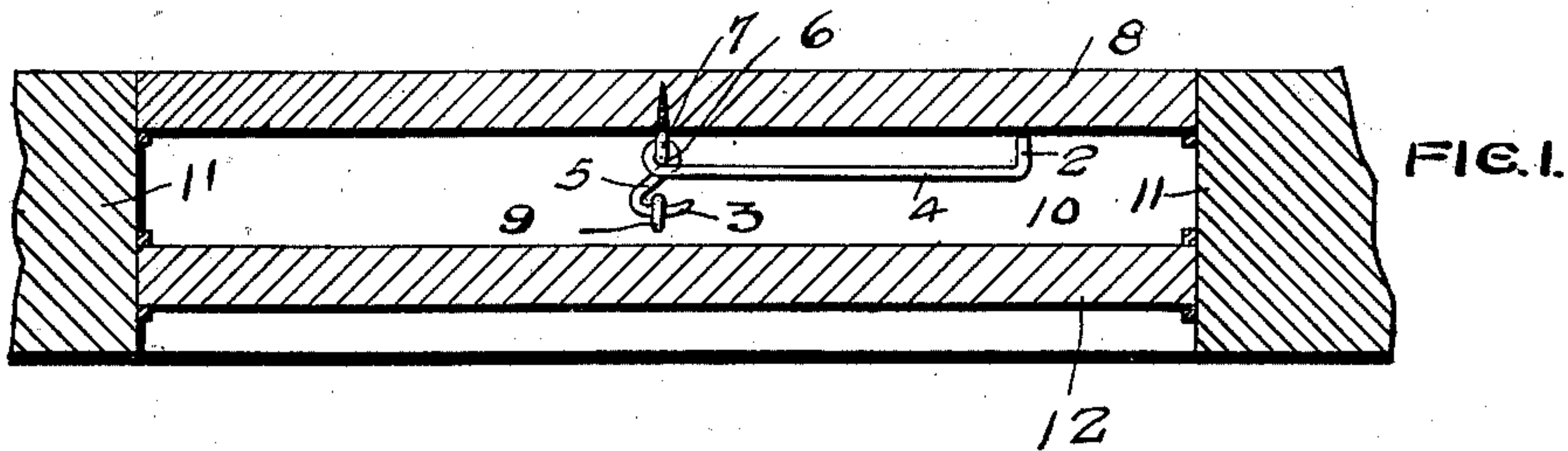


FIG. 1.

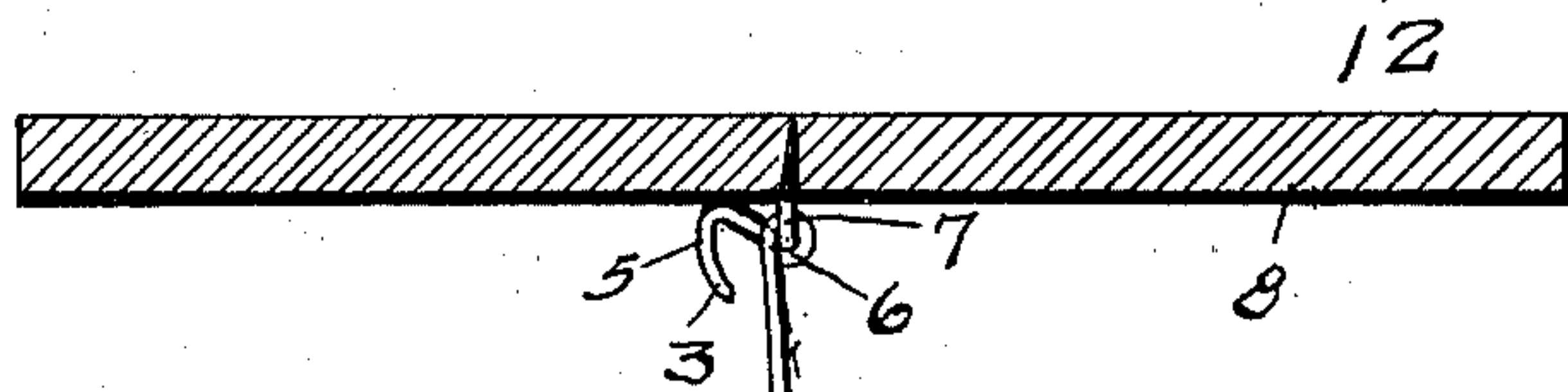


FIG. 2.

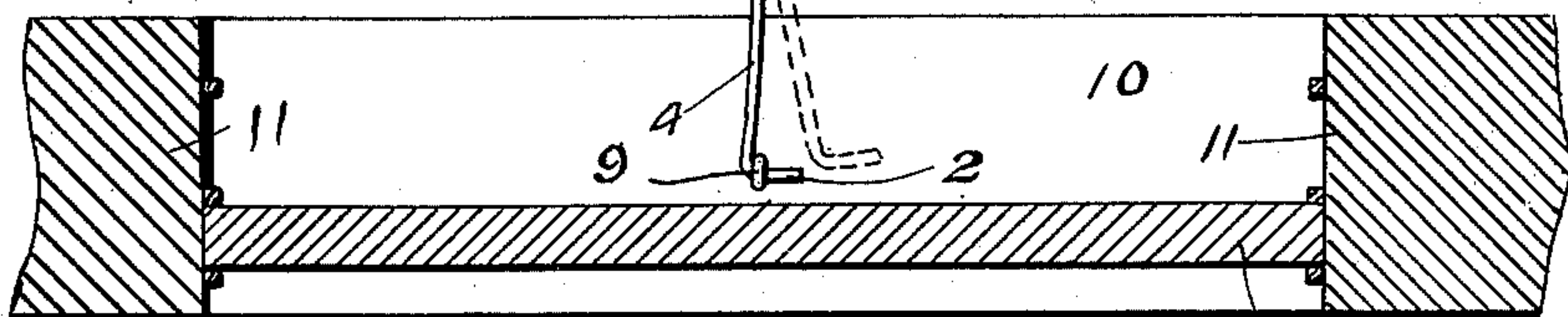


FIG. 3.

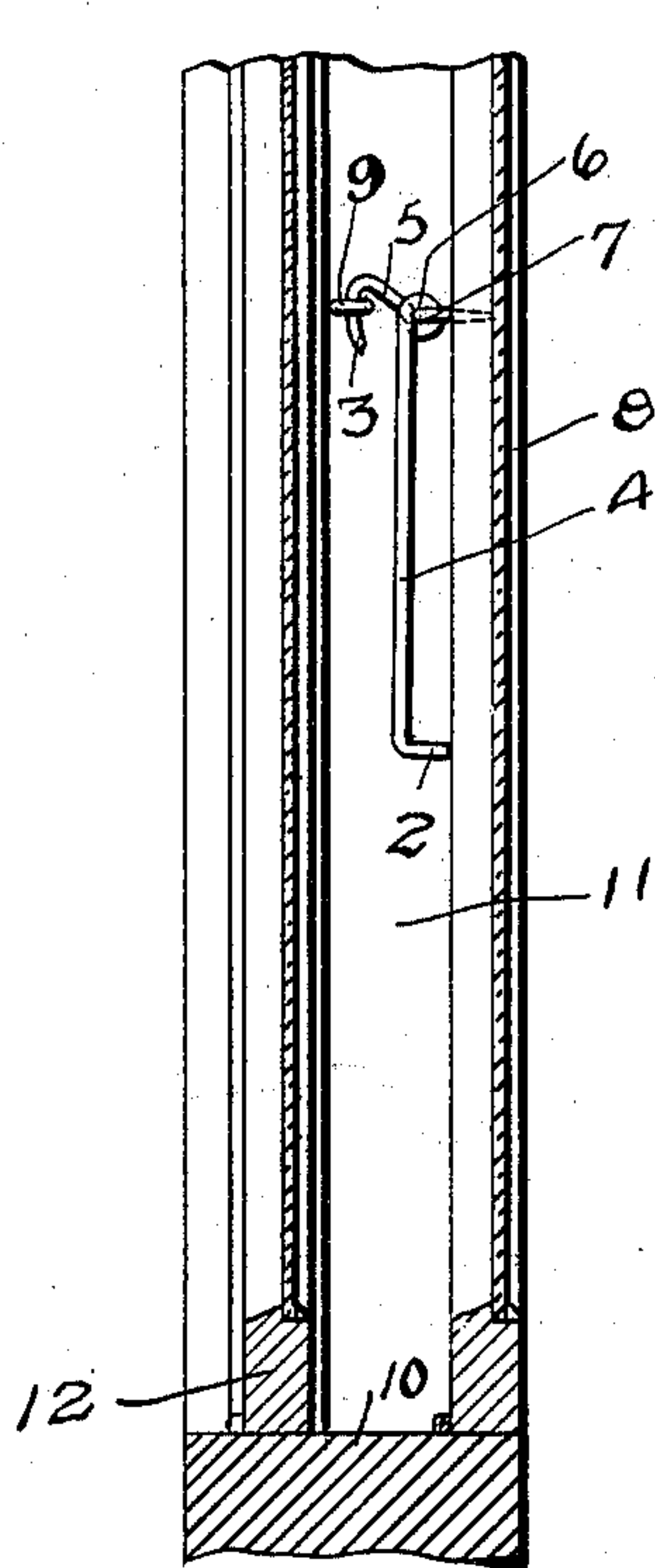
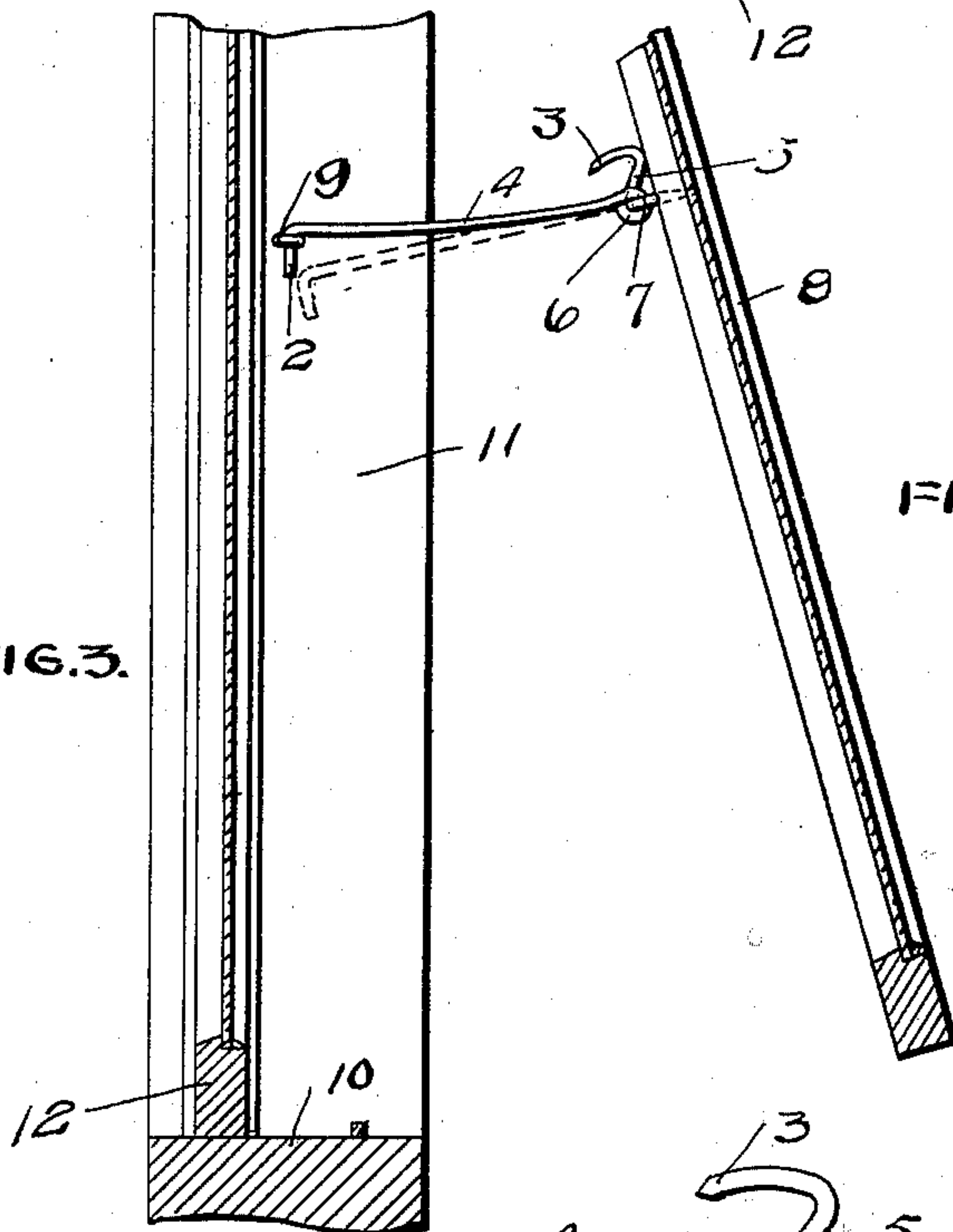


FIG. 4.



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UNITED STATES PATENT OFFICE.

ELLIS R. DUTTON, OF MINNEAPOLIS, MINNESOTA.

STORM-SASH FASTENER.

SPECIFICATION forming part of Letters Patent No. 656,633, dated August 28, 1900.

Application filed December 11, 1899. Serial No. 739,895. (No model.)

To all whom it may concern:

Be it known that I, ELLIS R. DUTTON, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Storm-Sash Fasteners, of which the following is a specification.

My invention relates to storm-sash fasteners; and one object of the invention is to cheapen and improve the construction of storm-sash fasteners.

A further object of the invention is to provide a storm-sash fastener whereby the storm-sash may be fastened in either of its positions.

Another object of the invention is to provide a device of this class that may be made of wire.

My invention consists generally in various constructions and combinations, 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 part of this specification, and in which—

Figure 1 is a horizontal section of a window-frame, window-sash, and storm-sash, showing the fastener attached thereto. Fig. 2 is a similar view showing the storm-sash open, with the fastener in the other position. Figs. 3 and 4 are vertical sections showing the fastener applied to the side of the storm-sash. Fig. 5 is a perspective view of the fastener detached.

As shown in the drawings, the fastener comprises the two hooks 2 and 3, one having a long shank 4 and the other a short shank 5, so short that ordinarily it may be said to be part of the hook 3 itself. Between the parts 4 and 5 there is a curl or loop 6, that holds the screw-eye 7. The screw-eye 7 is fastened either in the bottom of the side rail of the storm-sash 8 and is the pivot upon which the fastener is turned to engage either of its hooks 2 3 with a staple, screw-eye, or like fastening 9, that is placed in the window-sill 10 or in the side 11 of the window-frame. The end of the hook 3 is preferably curved in an arc that diverges slightly from the screw-eye as the center, so that it cams somewhat upon the part 9 to draw the sash 8 home. The long arm or shank 4 serves as a convenient lever

in fastening the sash in its closed position, and when the window-sash 12 is lowered it will be impossible to disengage the hook 3 from the staple 9, owing to the interference to the movement of the long hook or crank by the window-sash 12. When it is desired to hold open the storm-sash, the window 12 is raised and the arm 4 of the fastener is drawn inwardly to disengage the short hooks. The angle between the arms 4 and 5 and the projection of the hook 3 back of the pivot are such that when the arm 4 is moved nearly to a perpendicular with respect to the storm-sash the bend of the hook 3 will strike the storm-sash, making it necessary to flex or bend the shank 4 in order to enter the hook 3 in the staple 9.

The fastener is made of spring steel or wire and the strength of the same causes the hook 2 to press firmly against the staple or fastening 9, preventing accidental disengagement thereof and also preventing the rattling of the storm-sash. If the wood is indented by the heel or bend of the hook 3, thereby rendering the spring ineffective to hold the hook 2 in the fastening 9, the screw-eye may be turned farther into the wood to lessen the distance between the sash-rail and the center of the curl or loop 6. If desired, a spring 14 may be employed between the arm 4 and the swinging sash to still more firmly hold the hook 2 in the fastening 9.

It is obvious that the hooks may be turned in either direction with relation to one another; that the shape of either hook may be modified, and that the device may be made in several pieces instead of in one piece of heavy wire. It is further obvious that the fastener is applicable to screens and any form of swinging window or sash, and I therefore do not confine my invention to the specific construction as is shown and illustrated in the drawings.

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

1. The storm-sash fastener comprising a single piece of wire having hooks at its ends, and having an intermediate curl for a pivotal fastening.

2. The storm-sash fastener, comprising the hooks 2 and 3 extending in the same direc-

tion, the long and the short shanks thereof, respectively, the curl 6, and the screw-eye provided therein, substantially as described.

3. The combination, with the window-
5 frame, of the storm-sash the fastener comprising the integral short and long hooks, the pivotal fastening intermediate thereof upon the storm-sash, the fastening upon the window-frame, said short hook adapted to engage
10 the storm-sash and compelling the flexing or bending of the long hook in order to fasten the same.

4. The combination, of the window-frame, with the window-sash and the storm-sash, and

the fastener comprising the long and short 15 hooks formed integrally and having a single fastening upon the storm-sash and a single fastening upon the window-frame, and said long hook preventing the disengagement of the short hook while the window-sash is 20 closed, substantially as described.

In testimony whereof I have hereunto set my hand, this 28th day of November, 1899, at Minneapolis, Minnesota.

ELLIS R. DUTTON.

In presence of—

C. G. HAWLEY,
M. E. GOOLEY.