

No. 884,099.

PATENTED APR. 7, 1908.

A. H. MARDEN.

SASH HOLDER.

APPLICATION FILED SEPT. 25, 1907.

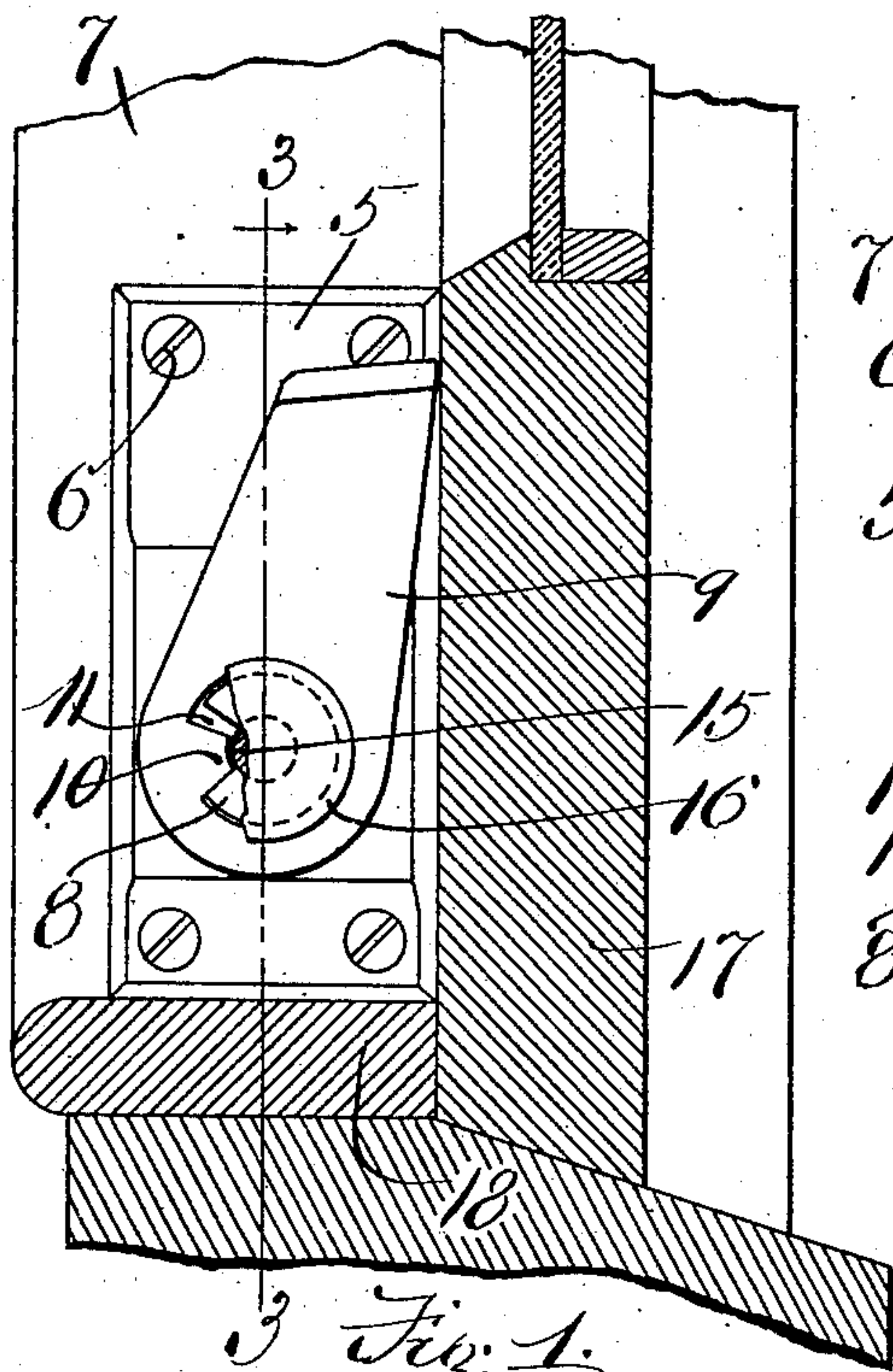


Fig. 1.

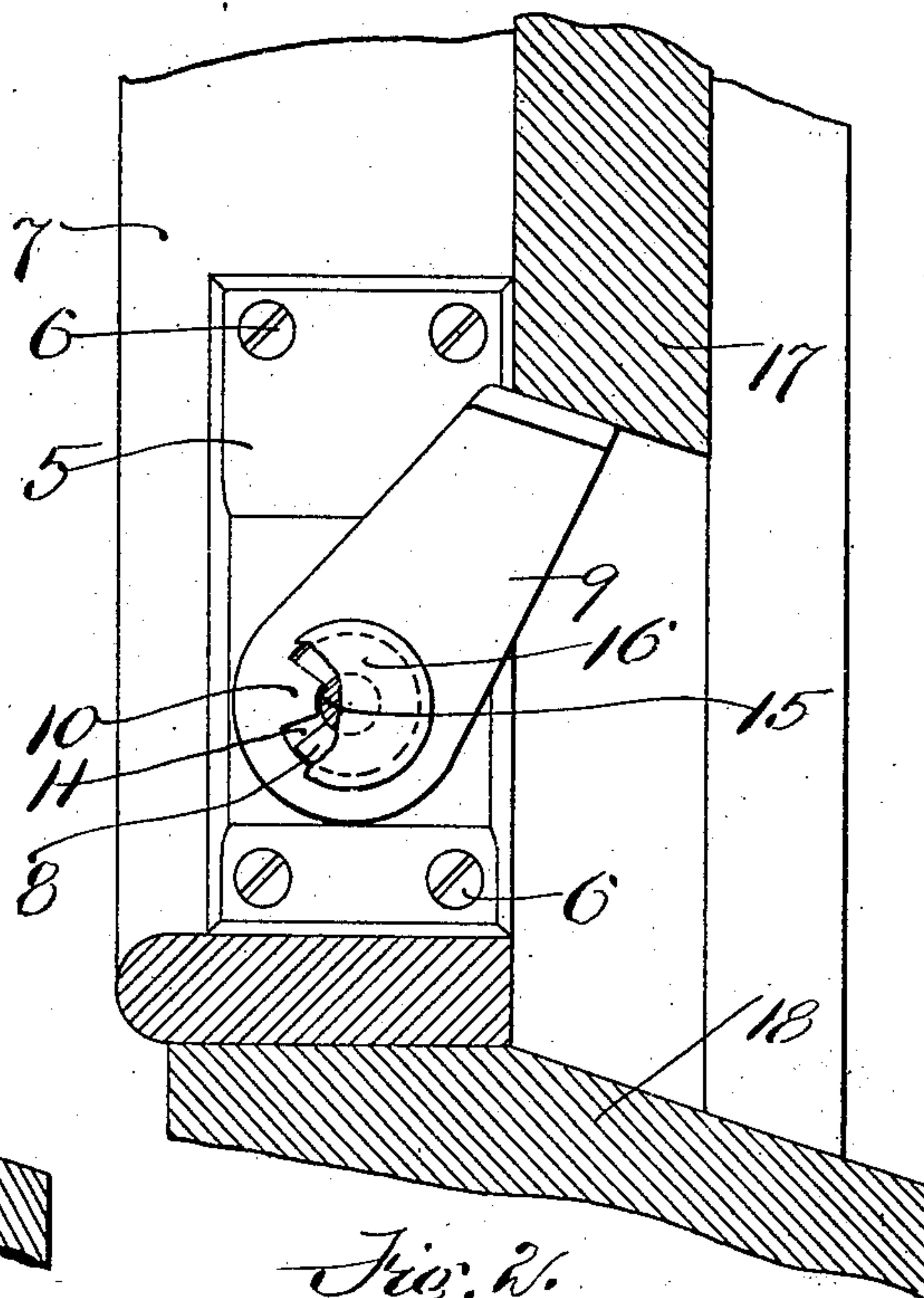


Fig. 2.

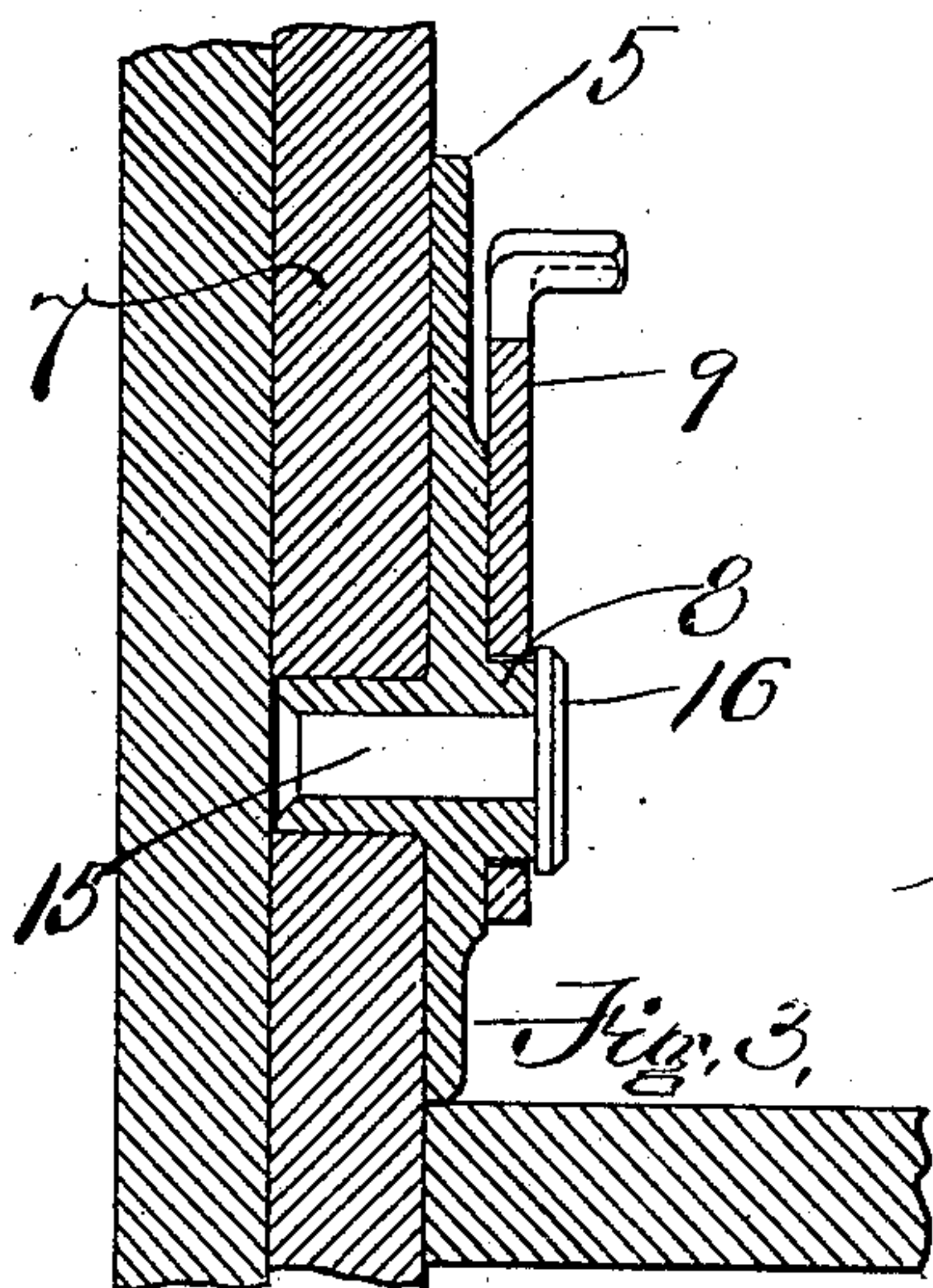


Fig. 3.

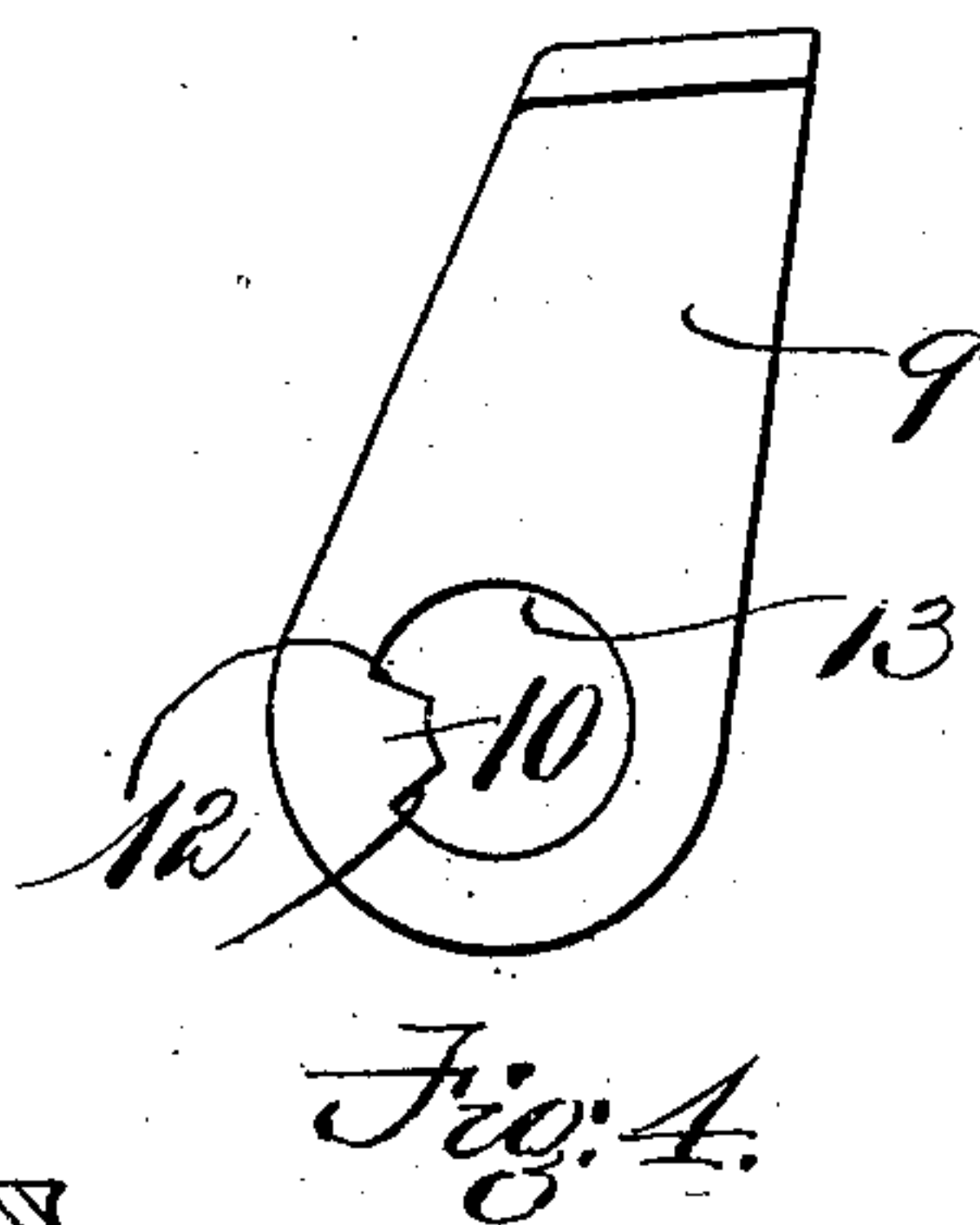


Fig. 4.

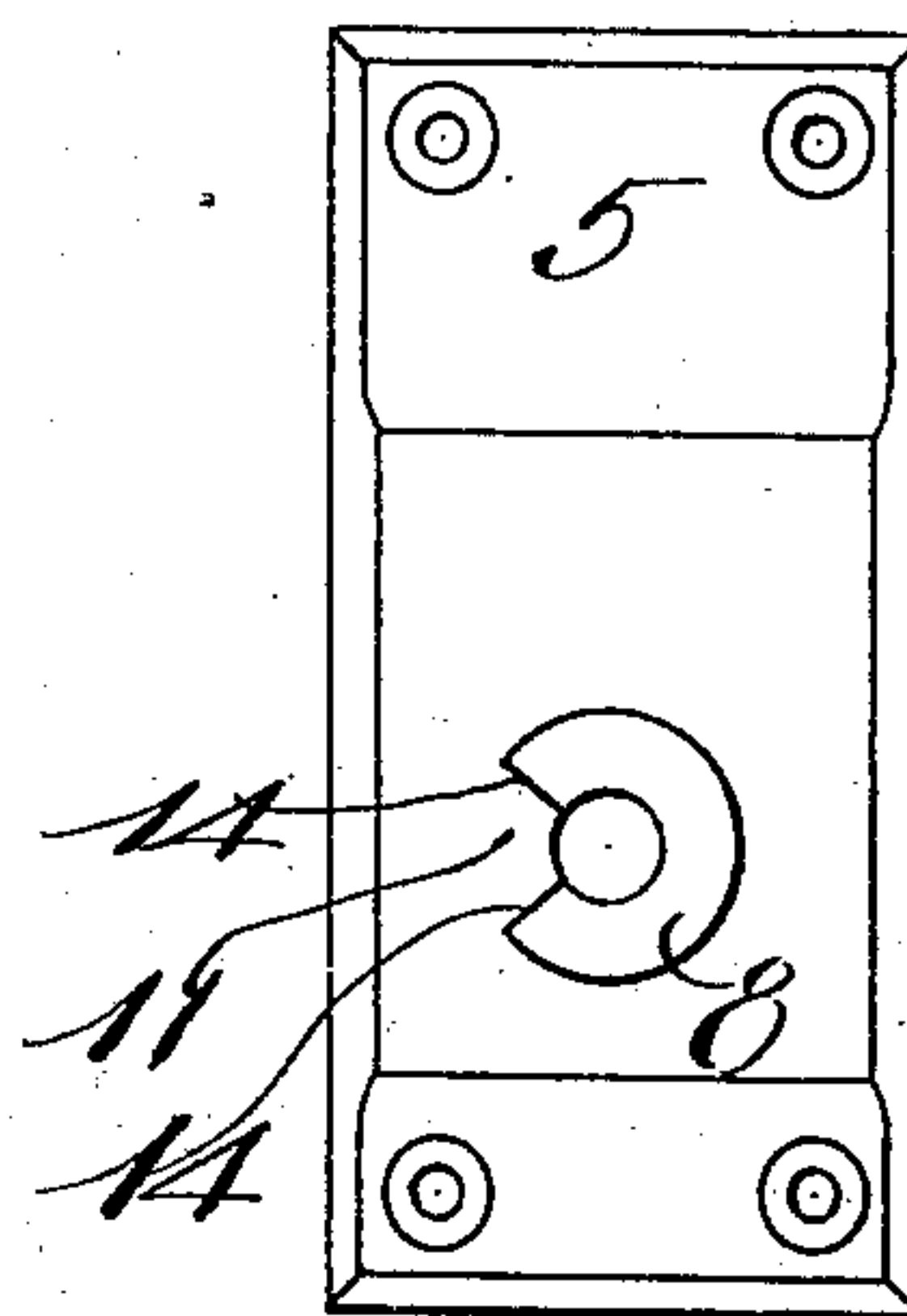


Fig. 5.

Witnesses:

Francis H. Bishop.

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Inventor:

Aldis H. Marden,

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# UNITED STATES PATENT OFFICE.

ALDIS H. MARDEN, OF NORTH CAMBRIDGE, MASSACHUSETTS.

## SASH-HOLDER.

No. 884,099.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed September 25, 1907. Serial No. 394,498.

*To all whom it may concern:*

Be it known that I, ALDIS H. MARDEN, a citizen of the United States, residing at North Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Sash-Holders, of which the following is a specification.

This invention relates to improvements in sash holders and is an improvement in details of construction, cheapness of manufacture, and certainty of operation upon a similar device for which I have made application for Letters Patent Serial No. 337,880, filed Oct. 8, 1906.

In railroad cars the window sash is lowered by gravity and when in its raised position is ordinarily intended to be held by a catch which may be released by the fingers. Very often the sash binds in the casing and through carelessness or neglect is not pushed up to its full extent and until the catch is locked in its raised position. Thus it often happens that a passenger becomes injured by the sash falling and striking his hand or arm, thereby injuring the same. By reason of these accidents railroad companies are often compelled to pay heavy damages.

The object of this invention is to provide a sash holder which may be secured to the side of the window casing near the bottom and so constructed and arranged as to prevent the occurrence of the above described accidents, and it is further the object of this invention to provide a sash holder of the character described which is simple in its construction, capable of being manufactured cheaply, is strong and certain of operation, and which is so constructed that it cannot be rendered inoperative either accidentally or by being tampered with.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings: Figure 1 is a vertical sectional elevation of a car window with my improved sash holder thereon, the sash being shown in its closed position, and a portion of the sash holder being broken away and shown in section for the purpose of illustration. Fig. 2 is a sectional elevation similar to Fig. 1, showing the sash partly raised and resting upon the sash holder. Fig. 3 is a section, partly in elevation, taken on line 3—3 of Fig. 1. Fig. 4 is a detail front elevation

of the rocker arm. Fig. 5 is a detail front elevation of the plate upon which the rocker arm is pivoted.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 is a plate adapted to be secured, by means of screws 6, to the side of the window casing 7 near the bottom thereof. The plate 5 is provided with a hub 8 which projects from the front face of said plate, is preferably integral therewith and constitutes a pivot which extends from the plate 5 in a direction parallel to the face of the sash. A rocker-arm 9 is mounted upon said hub and is adapted to rock thereon. Said rocker-arm has a projection 10 thereon which extends into a segmental slot 11 provided in the hub 8. The sides 12, 12 of the projection 10 are preferably radial from the center of the hole 13 which extends through said rocker-arm 9. The sides 14, 14 of the segmental slot 11 are also preferably made radial from the center of said hub 8.

The length of the slot 11 is greater than the width measured circumferentially of the projection 10, so that when the rocker arm is in position it may be rocked upwardly into the position illustrated in Fig. 1 where the lower radial side of the projection 10 rests against the lower radial end of the slot 11 and when the window is opened, the arm, by reason of gravity, tips into the position illustrated in Fig. 2, when the upper radial side of the projection 10 rests against the upper end of the slot 11, and the device then forms a lock to prevent the sash from falling.

The hub 8 is extended at the back of the plate 5, as seen in Fig. 3, and a suitable hole is bored in the window casing to receive said hub. The rocker arm and the plate 5 are joined together by a pin or rivet 15 which extends entirely through the hub 8 and is riveted thereto. The head 16 of said rivet projects over and covers the slot 11 and the projection 10, serving the two-fold purpose of keeping the rocker arm upon the hub 8 and also of covering up the slot 11 so that no dirt or other material can get into said slot, either accidentally or through maliciousness.

The angle through which the rocker arm may be tipped is determined by the difference in length measured circumferentially between the slot 11 and the projection 10. The arm 9 is so formed, and the plate 5, with its hub 8, so located relatively to the sash 17, and the relative arrangement of the projec-



tion 10 and the slot 11 is such that the center of gravity of the arm 9 at all times lies at the right of the center line 3—3 of Fig. 1. In other words the device is so constructed and  
 5 arranged that by reason of gravity, the arm 9 at all times tends to swing toward the right Fig. 1. Thus it will be seen that when the sash is closed, as shown in Fig. 1, the arm 9 bears against said sash and when the sash is  
 10 raised the arm 9 swings into the path of movement of said sash and said arm occupies the position shown in Fig. 2.

As hereinbefore stated, it is customary to have a catch to retain the sash 17 in its  
 15 raised position. If said catch should fail to hold, or if for any reason the sash should be dropped from a raised position, it would strike the arm 9, as illustrated in Fig. 2, and thus be prevented from falling upon the  
 20 hand or arm which might be lying across the window sill 18. When it becomes necessary to entirely close the sash 17, said sash may be slightly lifted and the arm 9 may then be withdrawn from the path of movement of  
 25 the sash and said sash may then be allowed to close as shown in Fig. 1.

It will be noted that the device is formed as a whole in three parts. The plate 5 and the arm 9 can be cast each in one piece and  
 30 are so constructed that they can be easily buffed and finished from the rough casting in readiness to be joined together by the pin or rivet 15. The rivet 15 is an inexpensive piece having a perfectly straight shank, so  
 35 that no machine work is necessary upon the rivet, but such rivets may be struck up in a rivet making machine at a very slight cost. The only labor necessary to complete the article is to place the arm 9 upon the hub 8 and  
 40 fasten the rivet, as shown, by heading the same over at the rear end of the hub 8. By having the hub 8 integral with the plate 5 a large bearing is obtained for the arm 9 to rock on and great strength is secured, as the

projection 10 lies in the same general plane 45 as the hub 8, so that it will be necessary to shear off said hub in order to break the same, the same being true of the projection 10, that is, there is no twisting or torsional strain brought to bear upon any of the parts. 50 These matters of strength, simplicity of construction and manufacture are extremely important in a device of this nature, as it is necessary that the same should be manufactured within a certain price in order to be 55 adopted by the railroads.

Having thus described my invention, what I claim and desire by Letters Patent to secure is:

1. A sash holder comprising a plate adapted to be fastened to a window casing and having a hub constituting a pivot extending therefrom parallel to the face of the sash, an arm mounted upon said hub and adapted to rock thereon, said arm having a projection 60 thereon extending into a slot provided in said hub, whereby the angle through which said arm may be rocked in opposite directions is limited. 65

2. A sash holder comprising a plate adapted to be fastened to a window casing and having a hub constituting a pivot extending therefrom parallel to the face of the sash, an arm mounted upon said hub and adapted to rock thereon, said arm having a projection 70 thereon extending into a slot provided in said hub, whereby the angle through which said arm may be rocked in opposite directions is limited, and a pin fast to said hub which projects over and covers said slot and 80 projection.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALDIS H. MARDEN.

Witnesses:

CHARLES S. GOODING,  
 LESLIE O. MARDEN.