

G. L. FOX.
WINDOW BAR.
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953,197.

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Fig. 1.

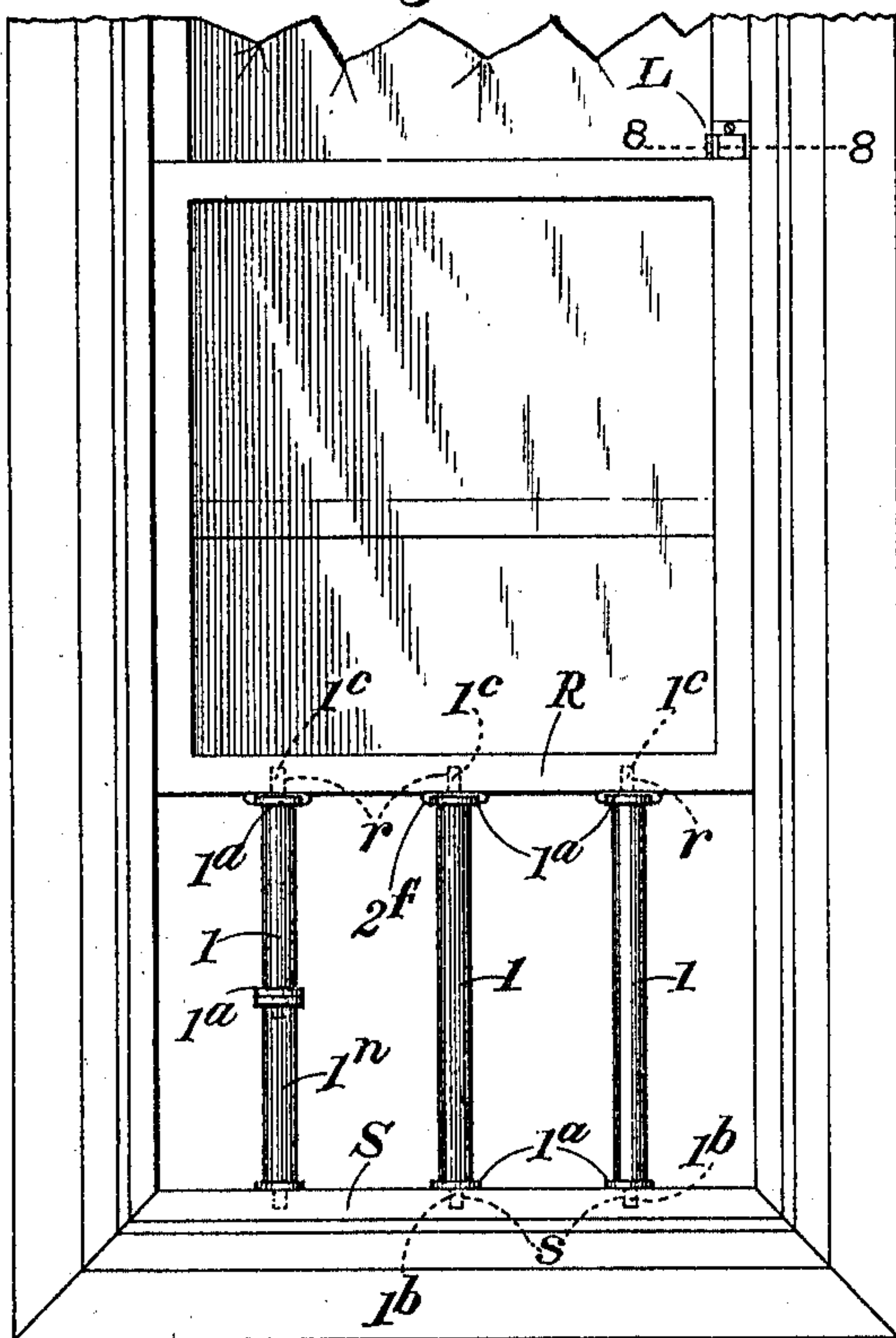


Fig. 2.

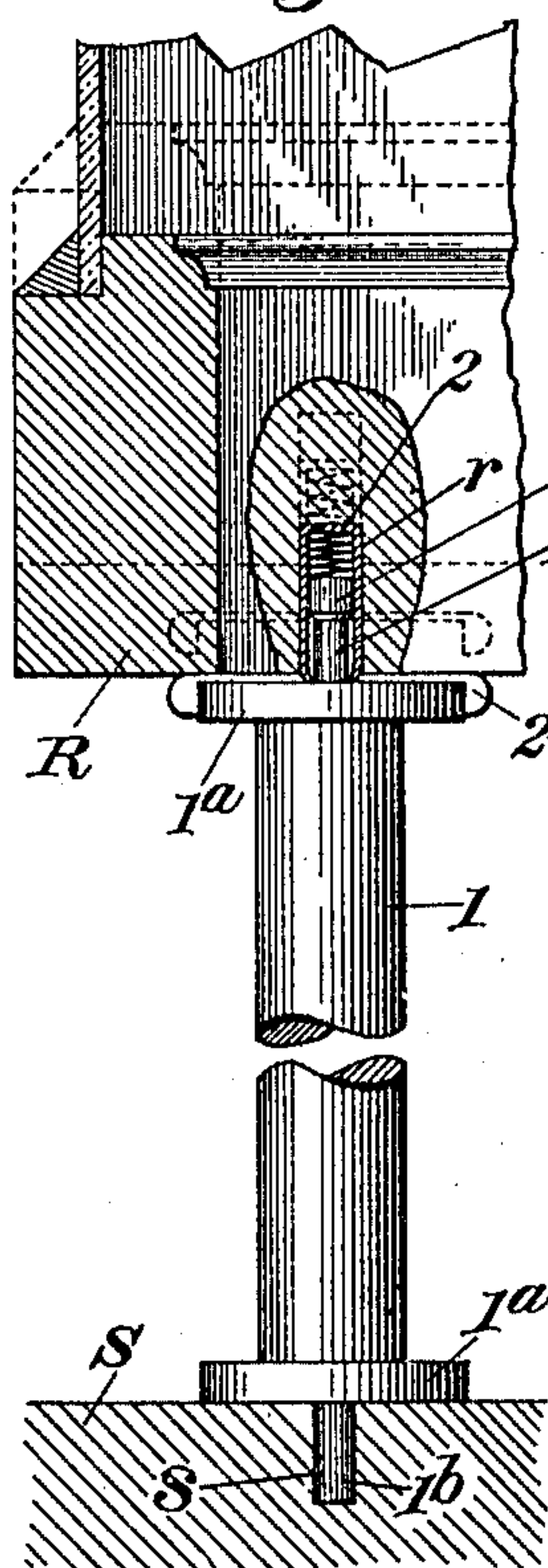


Fig. 3.

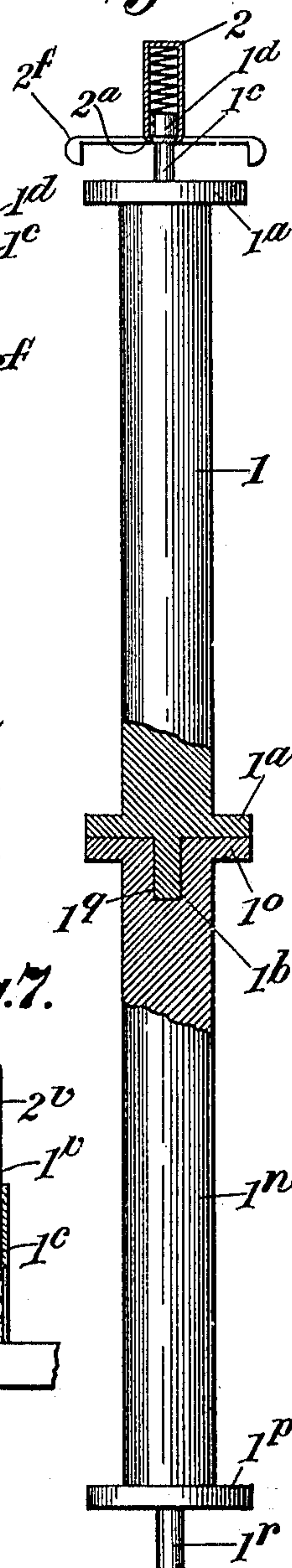


Fig. 4.

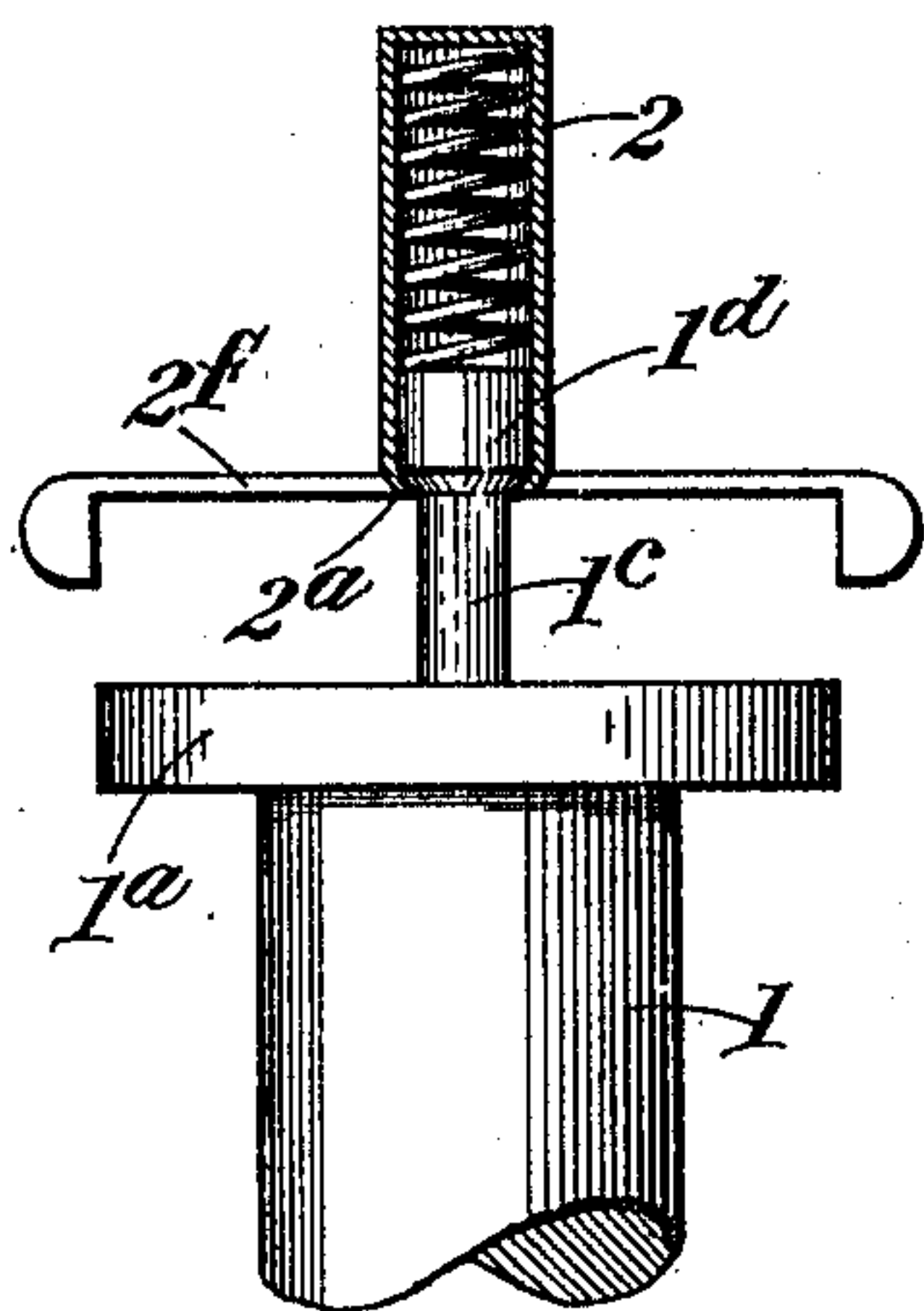


Fig. 5.

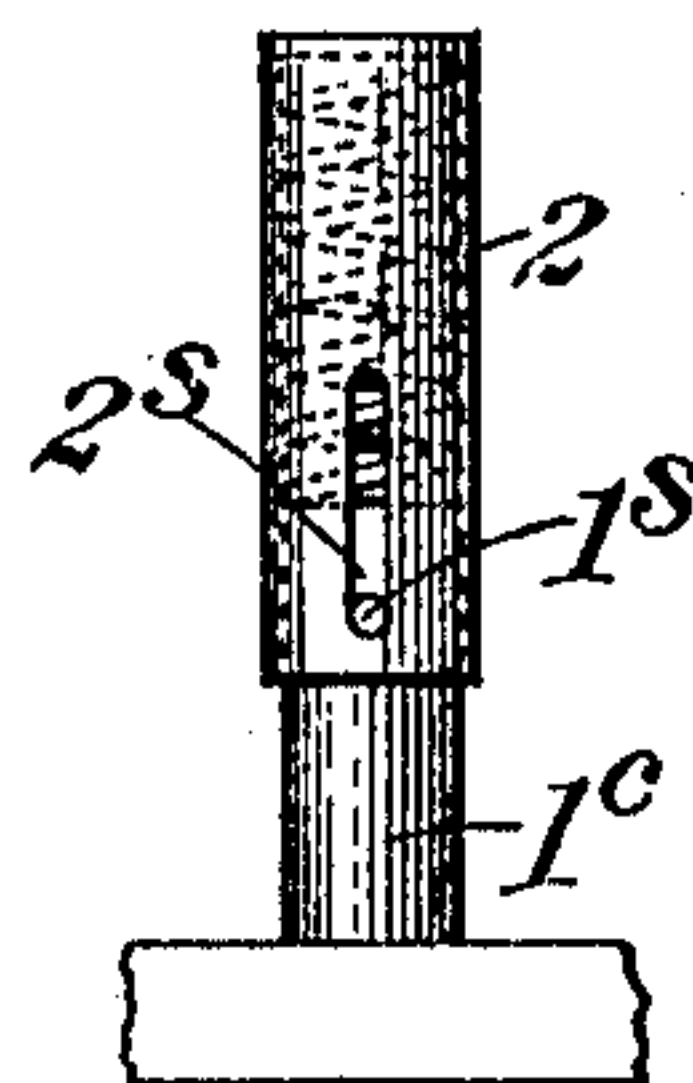


Fig. 6.

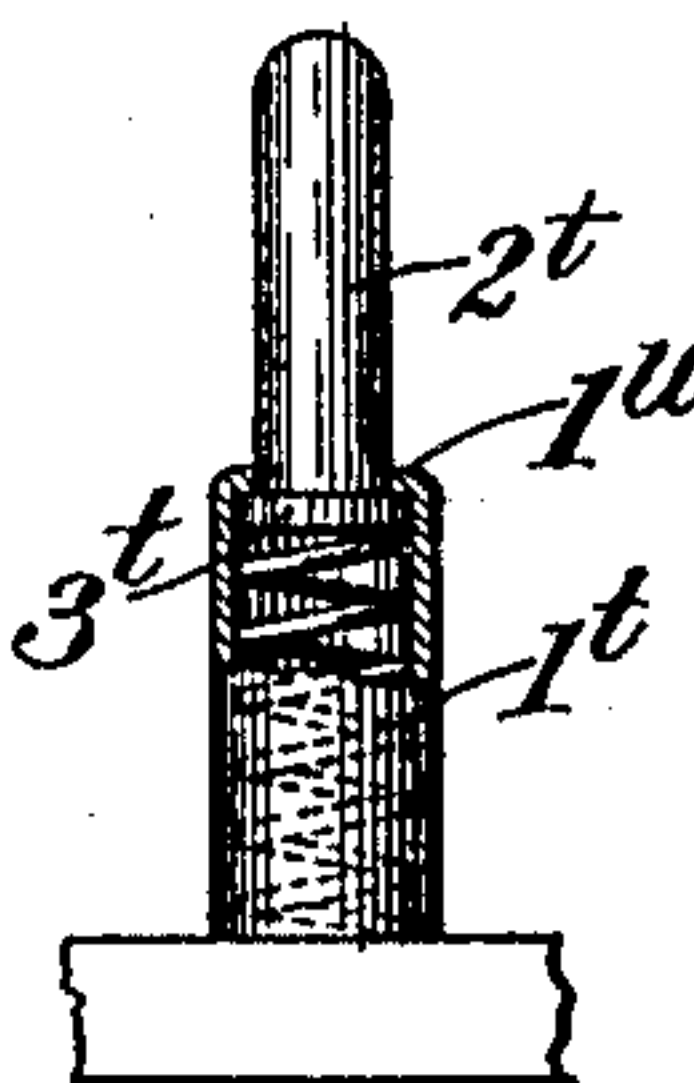


Fig. 7.

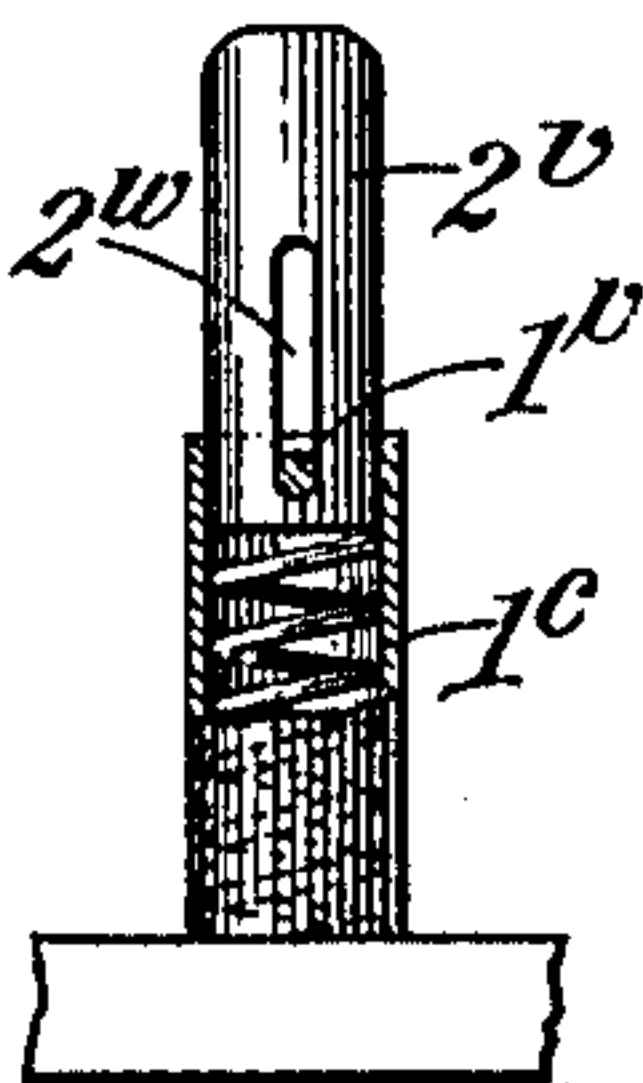
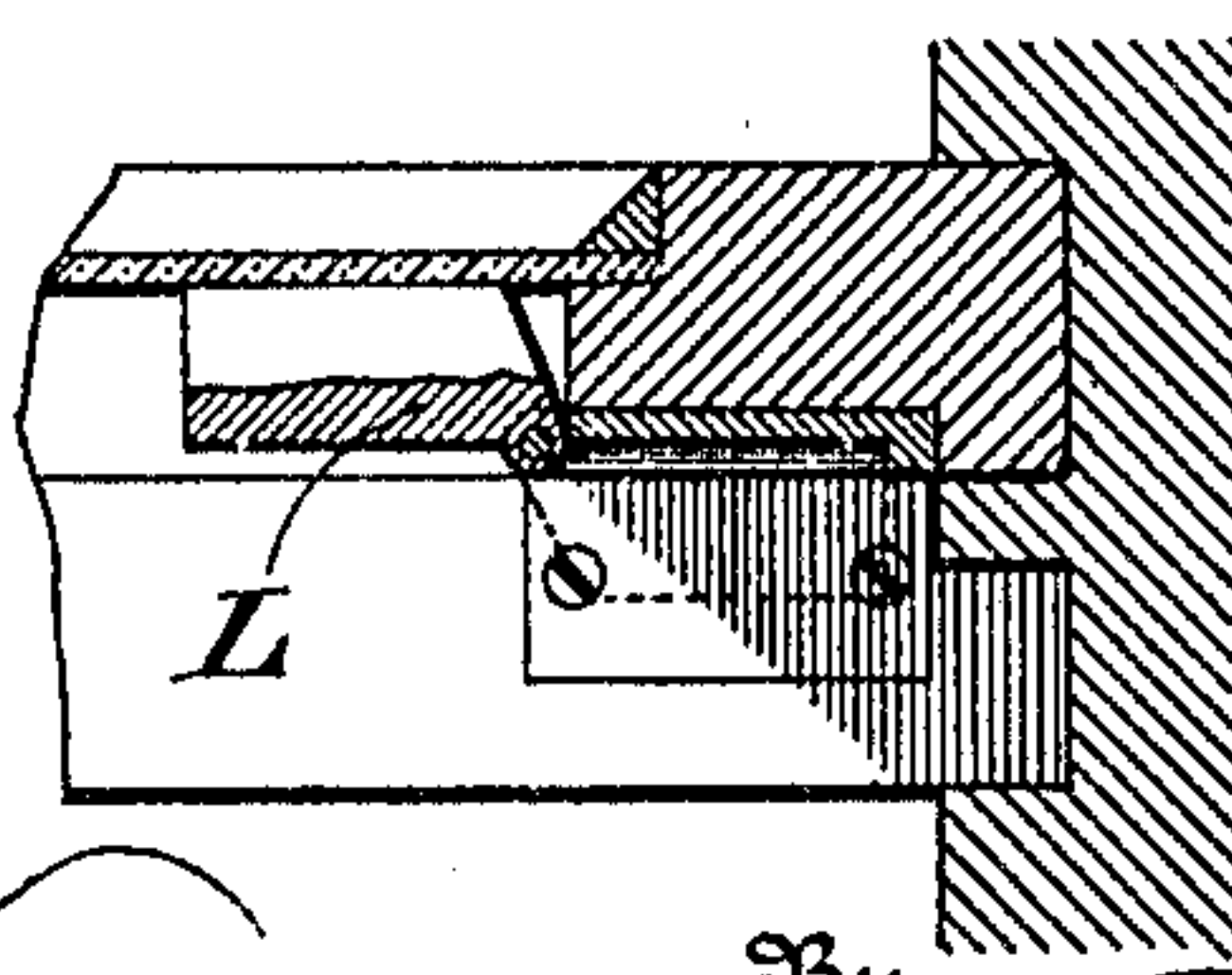


Fig. 8.



Witnesses

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WINDOW-BAR.

953,197.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE L. FOX, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Window-Bars; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is a novel device for barring windows, with one or more bars as needed, to afford protection from intruders, or to prevent persons inside falling out.

The invention is embodied in a bar which may be made in sections, and is provided with trunnions on its ends to engage in holes or sockets in the bottom rail of the lower sash when raised and in the window sill, and provided with flanges on its ends to afford enlarged bearings against the sill and sash when the trunnions or pins are inserted in holes. And one of the trunnions is provided with a telescopic spring supported extension so that when more than one bar is to be used in a window, such bars can be readily inserted in position, or removed, one at a time; without liability of the other bars falling out or becoming displaced while one bar is being inserted or removed. The lower sash is raised and all the bars inserted in place and then they are secured by drawing the lower sash down upon the upper ends of the bars and then locking such sash so as to prevent raising thereof, the bars preventing egress or ingress through the window.

The invention will be clearly understood from the accompanying drawings, in which:

Figure 1 is a view of a window with several of the novel bars in position therein. Fig. 2 is an enlarged view of one of the bars detached, showing the sash lowered in full lines, and partly raised in dotted lines. Fig. 3 is an enlarged sectional view of one of the bars and a complementary extension bar, or section. Fig. 4 is an enlarged sectional view of the telescopic end stud of the bar showing the preferred construction. Figs. 5, 6, and 7 are detail sectional views of the extensible studs, showing various modifications of the construction thereof. Fig. 8 is a detail section on line 8—8, of Fig. 1.

Each bar 1 may be made of any suitable material, or combination of materials for purpose of lightness and strength, but is

preferably made of metal and of a length equal to the height to which it is ordinarily desired to have the window opened when barred; but their length may be varied by using extension-bars, or sections, as herein- after described. Each bar 1 is preferably provided on its ends with flanges 1^a to give ample bearing against the window sill S and against the lower rail R of the lower window sash. The bar is provided on its lower end with a small trunnion or stud 1^b, and on its upper end with a trunnion or stud 1^c; these studs being adapted to engage small holes or sockets s, r, in the sill and sash rail respectively; which holes can be readily made in the sash and rail at the desired points with a gimlet or nail.

The upper stud 1^c is preferably made extensible or telescopic; and as shown in Figs. 1, 2 and 4 it telescopes within a cylinder 2 which may be prevented from disengaging the stud by having its lower end contracted—or crimped—as at 2^a below the upper end or head 1^d of the stud, which head is of slightly greater diameter than the lower part of the stud. The cylinder may be slidably confined on the stud in any other suitable manner, which will allow the cylinder 2 to be raised and lowered on the stud. The cylinder is normally projected or raised by means of a spring 3 interposed between the closed upper end of the cylinder 2 and the upper end of stud 1^c. The cylinder 2 forms an elongation of the stud 1^c and it enables the bar to be readily placed in or removed from position without danger of any of the other bars falling out, as hereinafter explained. As the necessary longitudinal movement of the cylinder on the stud is small, the lower end of cylinder may be provided with a laterally projecting finger or flange 2^f, as indicated in Figs. 1 and 4, which enables it to be readily grasped and manipulated.

When a bar is being placed in position the lower trunnion 1^b is first inserted in a hole in the sill S, then the cylinder 2 is drawn down on stud 1^c and inserted in a hole in the lower rail of the raised lower sash, and the sash is then partly lowered, as indicated in dotted lines in Fig. 2, but not sufficiently to engage the trunnion 1^c. Then another bar 1 can be placed in position by first inserting its stud 1^b into another hole in the sill, and then retracting the cylinder 2 on its stud

1^c until it can be slipped under the sash rail, and released to engage its hole therein. The several bars can be successively inserted in position in this manner. After all are in
 5 place the sash is entirely lowered until the studs 1^c enter the holes in the sash rail and the latter bears firmly on the upper end of the flanges 1^a of the bar, as indicated in full lines in Figs. 1 and 2; then the lower
 10 sash is fastened down by a lock of any suitable kind, indicated at L in the drawings, so that it cannot be raised as long as it is locked, and the bars 1 are firmly secured in position thereby and prevent ingress or
 15 egress through the window.

When it is desired to remove a rod the lower sash should be unlocked and partially raised until its bottom rail is clear of the studs 1^c, but still in engagement with the
 20 spring projected cylinder 2, as indicated in dotted lines in Fig. 2, and the operator can then grasp finger or flange 2^f in the lower end of the cylinder 2 on the bar it is desired to remove, and readily depress such
 25 cylinder so as to disengage it from the sash rail,—then the bar can be removed, as is evident.

As shown in Fig. 5 the cylinder 2 is slidably connected with the stud 1^c by means
 30 of a pin 1^s transfixing the stud and engaging a slot 2^s in the cylinder. As shown in Fig. 6 the stud is made hollow as shown at 1^t, and a bolt 2^t is slidably confined in the hollow stud by an inwardly turned flange
 35 1^a on the upper end thereof as shown, the bolt being projected by a spring 3^t.

In Fig. 7 the stud is also shown as hollow, and a bolt 2^v is slidably confined therein by a pin 1^v transfixing the stud and engaging
 40 a slot 2^w in the bolt. These modifications illustrate a few of the various ways in which the stud can be made extensible so as to enable the rods to be placed in or removed from position, as above described.

45 In some cases it may be desired to vary the length of the bars, so as to change the position of the sash. To this end I provide extension bars 1ⁿ which have flanges 1^o, 1^p, on their ends, and a stud 1^r on one end, and a socket 1^q in the other end. In use the extension 1ⁿ is connected to one end of a bar 1, by inserting the stud 1^b of bar 1 into socket 1^q in extension bar 1ⁿ; and stud 1^r can be engaged in the sill. One such ex-
 50 tension bar is shown in Figs. 1, and 3.

Obviously by making the bars 1 separate, any desired number may be placed in any given window, and any one or more of such bars can be removed when desired to pass
 60 objects through the window without having to remove other bars, and by reason of the telescopic cylinders any rod can be retained in position while other rods are being inserted or removed.

While I have described the cylinder 2 as 65 engaging with the sash rail, the bars could obviously be inverted and the cylinders 2 engaged with the window sill.

Having thus described my invention what I claim as new is: 70

1. A window barring device comprising a bar having a stud on its end adapted to engage a hole in the window sill, a member telescoping with said stud and adapted to engage the hole before the sash is fully 75 lowered onto the stud, and to retain the bar in position during the insertion or removal of like bars.

2. A window barring device comprising a bar having studs on its ends adapted to en- 80 gage holes in the window sill and in the sash rail, a cylinder telescoping with one of the studs and adapted to engage a hole before the sash is fully lowered onto the bar and retain the bar in position during the inser- 85 tion or removal of like bars, and a spring for normally projecting the cylinder.

3. A window barring device consisting of a bar provided with laterally projecting flanges on its ends, and studs on its ends 90 adapted to engage holes in the window sill and in the sash rail, a cylinder telescoping one of the studs and adapted to preliminarily engage a hole before the sash is fully 95 lowered onto the bar, and a spring for normally projecting the cylinder.

4. A window barring device consisting of a bar having studs on its ends and an extension bar having a stud on one end, and a socket on the other end, the socket on the 100 extension bar receiving a stud on the other bar, substantially as described.

5. A window barring device comprising a bar having studs on its ends, and an extension bar having a stud on one end and a 105 socket in its other end adapted to receive one of the studs of the first bar; and an extensible member attached to the other stud of said first bar, the stud on the extension bar being adapted to engage a hole in a sill, and 110 the extensible member on the bar being adapted to engage a hole in the window sash rail, substantially as set forth.

6. A window barring device comprising a bar having a stud on its end adapted to en- 115 gage a hole in the sash or window sill, a member telescoping with said stud and adapted to engage such hole before the sash is fully lowered, and to retain the bar in position during the insertion or removal of like 120 bars, said member having a finger on its lower edge adapted to be grasped by the operator when it is desired to depress the member.

7. A window barring device comprising a 125 bar having a stud on its end adapted to engage a hole in the window sill or sash, a cylinder telescoping with said stud and

adapted to engage the hole before the sash
is fully lowered, said cylinder having a lat-
erally projecting finger on its lower edge
that may be grasped by the operator when it
5 is desired to depress the cylinder, and a
spring for normally projecting the cylinder.
In testimony that I claim the foregoing as

my own, I affix my signature in presence of
two witnesses.

GEORGE L. FOX.

Witnesses:

CHRISTINA BONHEYO,
BARTLETT HOLMES.