E. L. WATROUS.

SHUTTER FASTENER.

APPLICATION FILED JUNE 1, 1905.

955,728. Patented Apr. 19, 1910.

Fig. 5.

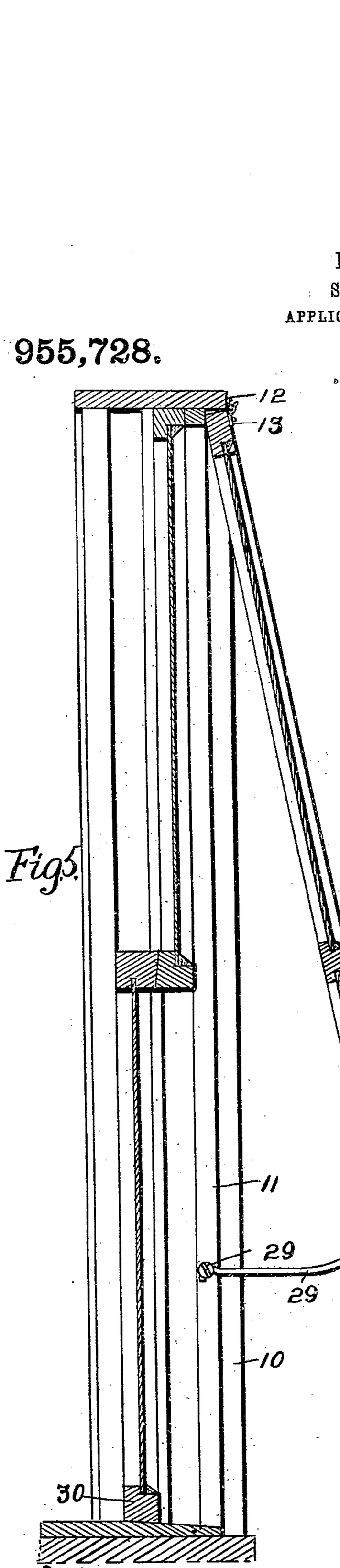


Fig. 4.

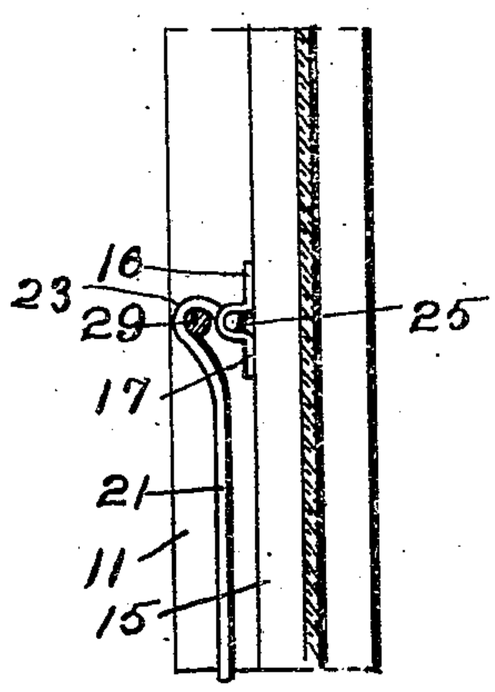
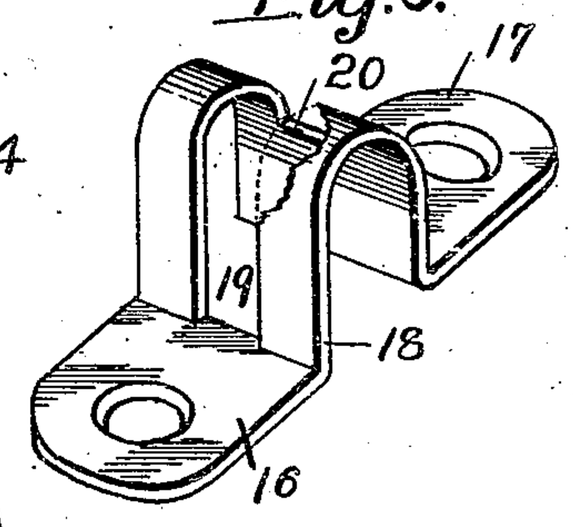


Fig. 3.



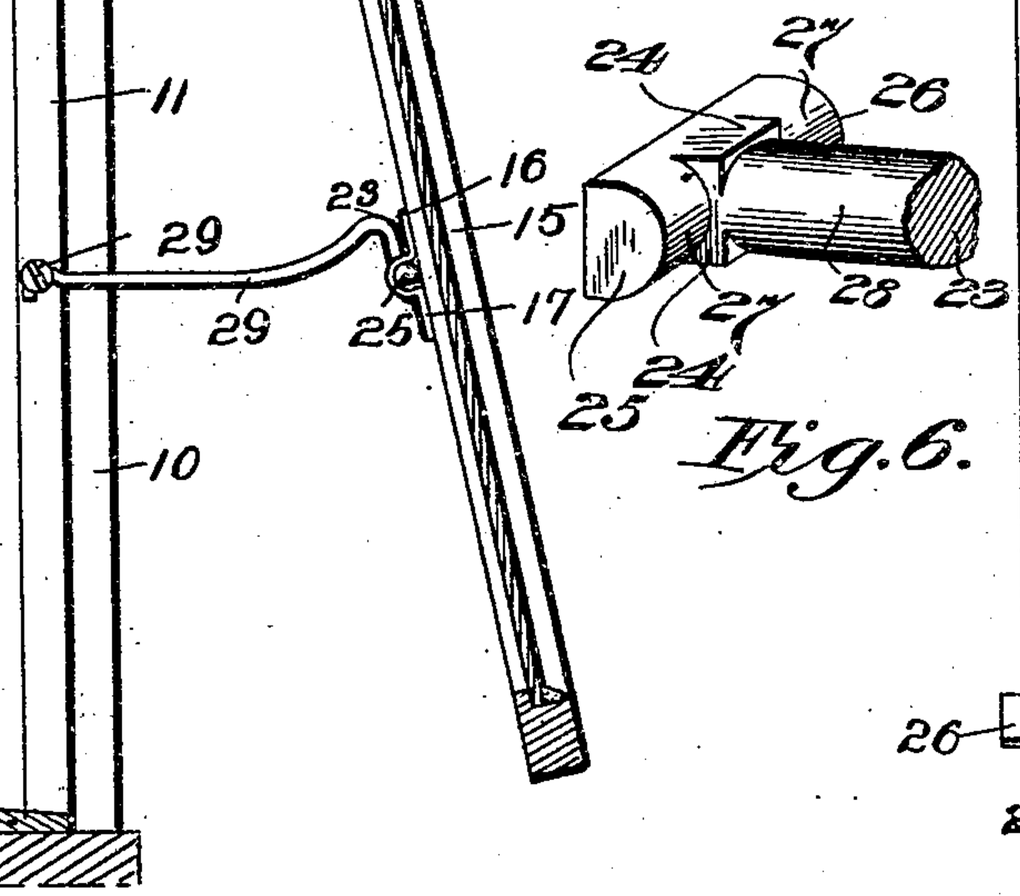


Fig. 6.

Fig. 2.

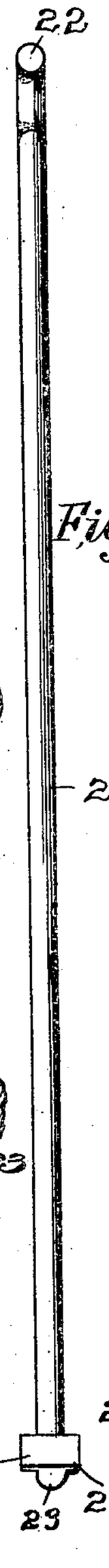
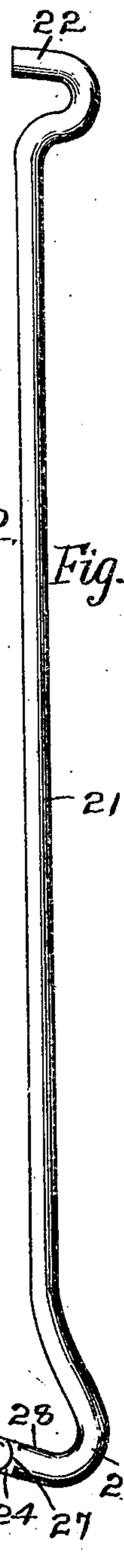


Fig. 1.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD L. WATROUS, OF DES MOINES, IOWA.

SHUTTER-FASTENER.

955,728. Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed June 1, 1905. Serial No. 263,292.

To all whom it may concern:

Be it known that I, EDWARD L. WATROUS, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a certain new and useful Shutter-Fastener, of which the following is a specification.

The objects of my invention are to provide a storm sash or screen fastener of durable and inexpensive construction which will not rattle in either of its positions, and it is so constructed that the storm sash or screen may be maintained in an open position or in a closed position.

A further object is to provide a storm sash or screen fastener which will, upon being released, and by pushing the storm sash or screen from a closed to an open position, automatically fasten itself and maintain the window in an open position.

A further object is to provide a storm sash or screen fastener which will, upon being released when the storm sash or screen is in an open position and the storm sash or screen moved to its closed position, automatically lock the storm sash or screen in a closed position.

My invention consists in certain details in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the hooked rod for forming a part of the fastener. Fig. 2 is an inverted plan view of the hooked rod. Fig. 3 is a detail view partially broken away of the support for the hooked rod which is designed to be secured to the storm sash. Fig. 4 is a detail, sectional view of a portion of the storm sash, showing the position of the fastening device when the storm sash is locked in a closed position, and Fig. 5 is a vertical, sectional view of the window frame showing the ordinary sashes therein in section and the storm sash in section maintained in its open position by the fastening device. Fig. 6 is a detail perspective view of the hook portion of the hooked rod.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate one side of the ordinary window frame, the numeral 11 to indicate the ordinary blind stop thereon, and the numeral 12 to indicate the top of the window frame. Secured to the top 12 of the window frame by means of the hangers 13 is the storm sash 14. Secured to the inner surface of the side rail 15 of the storm sash 14 is a rod supporting bracket which has two outwardly extending members 16 and 17 therein through which screws are designed to pass for securing this bracket to the side rail of the window sash. Between these outwardly extending members 16 and 17 is the substantially U-shaped connecting piece 18. This connecting piece has cut out of its central portion the slot 19 which extends from the outwardly extending member 16 to the point 20 in the side of the U-shaped portion 18. This U-shaped portion is strengthened at 20 by leaving the metal portion of it intact, which metal portion also serves as a limiting stop for the hooked rod.

I have provided a hooked rod having the shank 21 which has the hook 22 at one end and the hook 23 at its other end. Forming the outer end of this hook 23 I have provided a squared portion 24 and two outwardly extending lugs 25 and 26. The outer portion of the hook 23 and the lugs 25 and 26 are flattened. The inner surface of the lugs 25 and 26 are rounded, for the purposes hereinafter made clear. The hooked rod is passed through the slot 19 in such a way that the hook 22 is away from the U-shaped portion of the bracket, and so arranged that the rounded portions 27 of the projections 25 and 26 will engage the inner surface of the U-shaped portion 25 of this bracket, and so that the squared portion 24 of the hook 23 will engage the metal in the U-shaped portion 18 forming the sides of the slot 19, and so that the limiting stop 20 in the U-shaped portion 18 will be adjacent to the inner side 28 of the hook 23, so that this limiting stop 20 will be engaged by the squared portion 24 when the hooked rod hangs downwardly from its bracket as shown in Fig. 4. Owing to the fact that the slot 19 extends to the outwardly extending member 16 which is nearest the upper edge of the storm sash when the hooked rod bracket is attached to it, the hooked rod will be allowed to swing from the position shown in Fig. 4; that is, its lower limit of movement to the position shown in Fig. 5, its upper limit of movement. Extending outwardly from the blind stop 11 is the ordinary screw 29 which the hooked rod constantly engages.

In practical use and assuming that the storm sash is in the closed position shown in Fig. 4, and that the sash fastener has been secured as above indicated; that is, the bracket is secured to the side rail 15 of the storm sash and the hook 23 of the hooked rod is over the screw 29 and is maintaining the storm sash in a closed position, the operator simply raises the window sash 30 and throws the hook out of engagement with the screw 29 and then pushes the window outwardly so that the hooked rod slides over the screw 29 until it reaches the hook 22 at the free end of the hooked rod, and this hook drops over the screw 29 and maintains the storm sash at its outer limit of movement as shown in Fig. 5 of the drawings. When the storm sash is in an open position, as shown in Fig. 5 of the drawings, and the operator desires to close the window, he simply raises the hook 22 outwardly slightly out of engagement with the screw 29 and allows the hooked rod to slide over the screw 29 until the hook 23 is reached at which time the free end of the hooked rod will swing downwardly and cause the window to be automatically locked in a closed position by the hook 23.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, therefor is—

1. A sash fastener, comprising a bracket adapted to be secured to a sash, and having a raised central portion, with a slot extending throughout part of its length, a rod having lugs at one end thereof, passing through said slot in such a way that the lugs engage the raised portion of the bracket, said rod having a hook adjacent to said lugs, and a hook at the free end thereof, and a screw adapted to be secured to a window frame in position to be engaged by said rod throughout the entire movement of the sash and to maintain the rod in position when either of the hooks engages the screw.

2. A sash fastener, comprising a bracket adapted to be secured to a sash, a rod having lugs at one end thereof entering said bracket in such a way as to give said rod pivotal movement, and having a hook at its free end, and a screw adapted to be secured to a window frame in position to be engaged by said rod and to maintain the rod in position when either of the hooks engages the screw.

3. A sash fastener, comprising a bracket adapted to be secured to a sash, a hooked rod having lugs at one end thereof, flat on one side and curved on the other, pivotally mounted in said bracket, means in the support for limiting the movement of the hooked rod, said hooked rod having a hook adjacent to said lugs, and a hook at its free end, both of said hooks being secured to a window frame in position to be engaged by said rod throughout its entire movement for maintaining the sash in either an open or a closed position.

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