

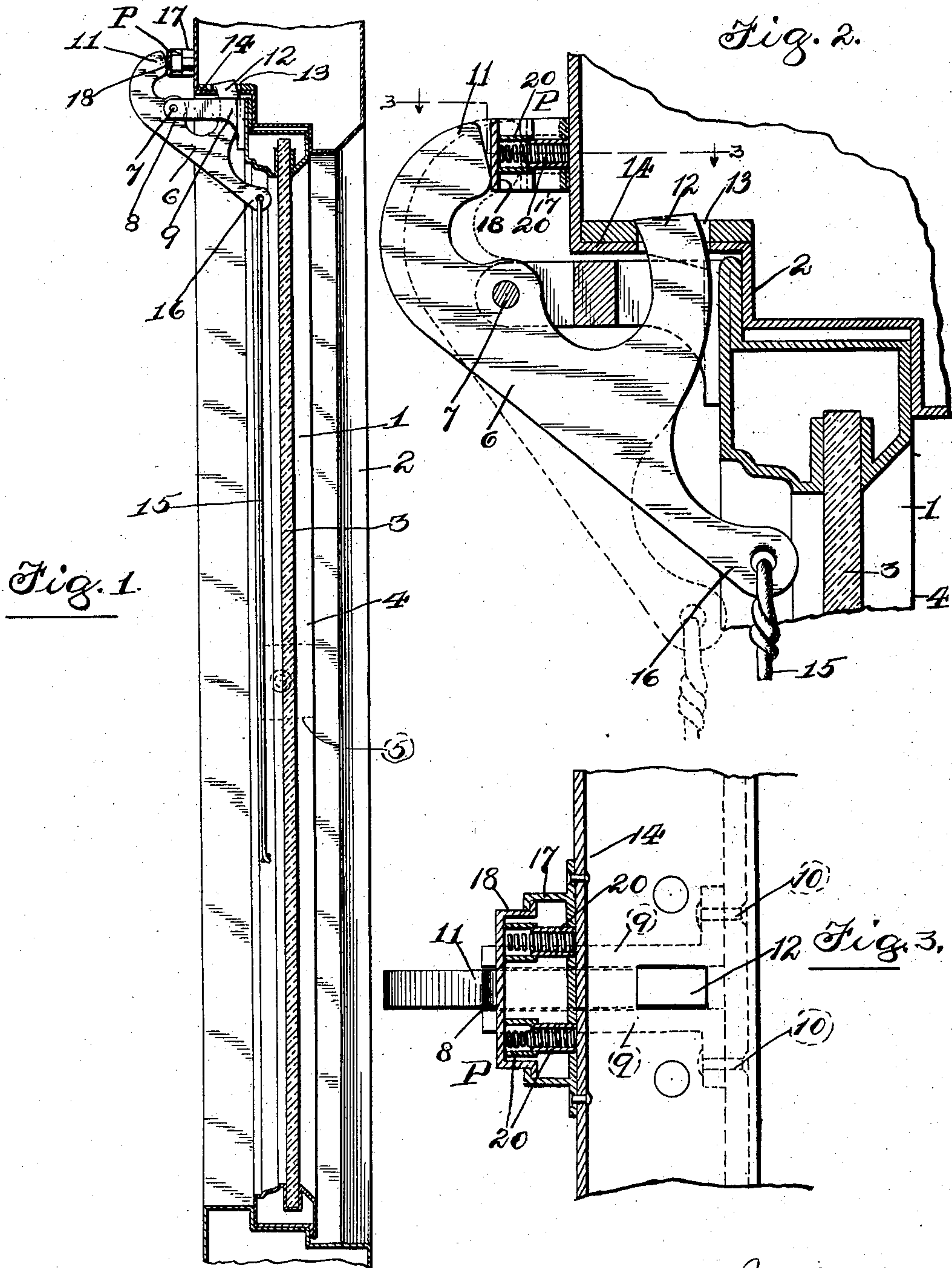
No. 742,090.

PATENTED OCT. 20. 1903.

W. D. WATSON.  
WINDOW FASTENER.

APPLICATION FILED OCT. 6, 1902.

NO MODEL.



Witnesses:

J. B. Weir  
Louis M. Whitehead

Inventor.

W. D. Watson  
by [Signature] Att'y



# UNITED STATES PATENT OFFICE.

WILLIAM D. WATSON, OF CHICAGO, ILLINOIS.

## WINDOW-FASTENER.

SPECIFICATION forming part of Letters Patent No. 742,090, dated October 20, 1903.

Application filed October 6, 1902. Serial No. 126,028. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM D. WATSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Fasteners, of which the following is a specification.

This invention relates to fasteners or latches for swinging windows and the like, and is more particularly designed as an improvement upon the fastener set forth in my prior Letters Patent of the United States, No. 654,371, granted July 24, 1900.

In the operation of the fastener set forth in the above-mentioned Letters Patent it has been discovered that inasmuch as the very first movement of the locking-lever starts the window away from the casing the slot provided in the latter for the reception of the locking-bolt must be considerably larger than is necessary for locking purposes in order to prevent the binding of the bolt against the front of the slot during such initial swinging movement of the window. This difficulty is avoided in the present improvement by providing a striking-plate on the window-casing which will yield or spring inwardly when the locking-lever is first pulled, and will thus permit the locking-bolt to be entirely withdrawn from the slot in the casing before the lever meets with sufficient resistance to start the window.

The invention consists in the matters thus and hereinafter set forth, and particularly pointed out in the appended claim, and will be fully understood from the following description of the accompanying drawings, in which—

Figure 1 is a sectional side elevation of a swinging window with fastener constructed in accordance with my invention. Fig. 2 is an enlarged detail view. Fig. 3 is a horizontal sectional detail through the spring striking-plate on line 3 3 of Fig. 2.

In said drawings, 1 designates the window-sash, and 2 the window-casing, which is built into the window-opening provided in the wall of the building to receive the sash. The latter is herein shown as comprising a tubular metallic frame within which the glass 3 is suitably secured and through the sides 4 of which plates 5 are passed to pivotally sup-

port the sash within the casing, these pivot-bolts being so located that the weight of the sash tends to swing it closed.

As in my former patent, the fastener F itself comprises an oscillatory lever 6, which is pivoted at 7 between the lugs 8 of a clip 9, that is rigidly secured to the upper edge of the sash by rivets 10 or the like. This lever 6 thus swings in a plane at right angles to the sash and the sash-pivots and is provided with an upwardly-projecting contact end 11, arranged to strike a plate on the window-casing as the window approaches its closed position, and with an upwardly-projecting locking-bolt 12, which locks the window when closed by projecting into a slot or socket 13 in a downwardly-facing ledge 14 of the top of the window-casing. The contact end 11 and bolt 12 of the lever are arranged on opposite sides of the pivot 7, and the bolt 12 is curved about the pivot 7, so that it will oscillate concentrically with respect to the latter. A releasing cord or chain 15 is so secured to the lever that a pull upon the cord will tend to swing the lever upon its pivot, so as to retract the locking-bolt from the slot or socket 13, and, as herein shown, this cord is fastened to the extremity 16 of the lever on the same side of the pivot as the bolt 12 and at such a distance from the pivot as to afford a conveniently great leverage for retracting the bolt and forcing the window open.

In the present improvement the contact end 11 of the lever does not strike directly against the casing, but against a yielding striking-plate P, which is riveted or otherwise suitably secured to the casing at a point where the end 11 of the lever will come in contact with it. As herein shown, this plate consists of a base 17 and a yielding front 18, which is adapted to slide within the base, but is normally held within the base by flanges 18. To keep the front plate normally projected and yet enable it to yield under the contact of the lever 6, springs 19 are applied between the front plate and base in any suitable manner. As herein shown, these springs are of coiled wire and are inclosed within telescoping tubular guides 20, which prevent displacement either of the springs or plate. By thus mounting the front plate between the flanges carried by the base-plate



and employing telescopic guides inclosing the actuating-springs it will be observed that the front plate will be prevented from tilting or binding in its movements, irrespective of the point at which the end 11 of the lever strikes it. This construction therefore is especially advantageous when used in connection with my form of locking-lever.

In the operation of the device thus described the swinging of the window to its closed position will bring the locking-bolt of the lever beneath the ledge 14 of the casing before its end 11 strikes the contact-plate P, which latter will then yield to permit the window to swing closed and the locking-bolt to arrive opposite the slot or socket 13, into which it will then be forced by the pressure of the springs 19 of the striking-plate. Any direct pressure upon the window will then be positively resisted by the locking-bolt; but when a pull is exerted upon the cord 15 the resultant swinging of the lever upon its pivot will first compress the striking-plate until the bolt is released from its socket, as shown in dotted lines, Fig. 2, and will then exert its leverage to force the window open.

It will be observed that the spring striking-plate is attached to the window-frame above and out of the path of the sash and also that the plate is flat on its striking-face in order that should the sash sag or the plate be set slightly inaccurately the striking end 11 of the lever will when it comes in contact with

it strike it squarely and not with a glancing blow.

I claim as my invention—

In combination with a window-casing and sash pivoted upon horizontal pivots, of a locking device consisting of a lever pivotally mounted on the upper end of the sash and provided with a contact end extending above the pivotal point and also with an upward projecting bolt adapted to engage the window-casing, a pull-cord or the like attached to the lever, and a resilient buffer device attached to the window-casing coincidently with the contact end of the lever so as to receive the impact of the same when the sash is closed, said resilient device consisting of a flanged base-piece adapted for attachment to the window-casing, a front plate having a flat striking-face and provided with flanges 18 at its opposite edges engaging and having a sliding connection with the flanges on the base-plate, coil-springs interposed between said plates, and telescopic tubular guides inclosing said springs, for the purposes set forth.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two subscribing witnesses, this 27th day of September, A. D. 1902.

WILLIAM D. WATSON.

Witnesses:

HENRY W. CARTER,  
K. A. COSTELLO.