(No Model.)

J. N. EUWER.

SASH FASTENER.

No. 559,483. Patented May 5, 1896.

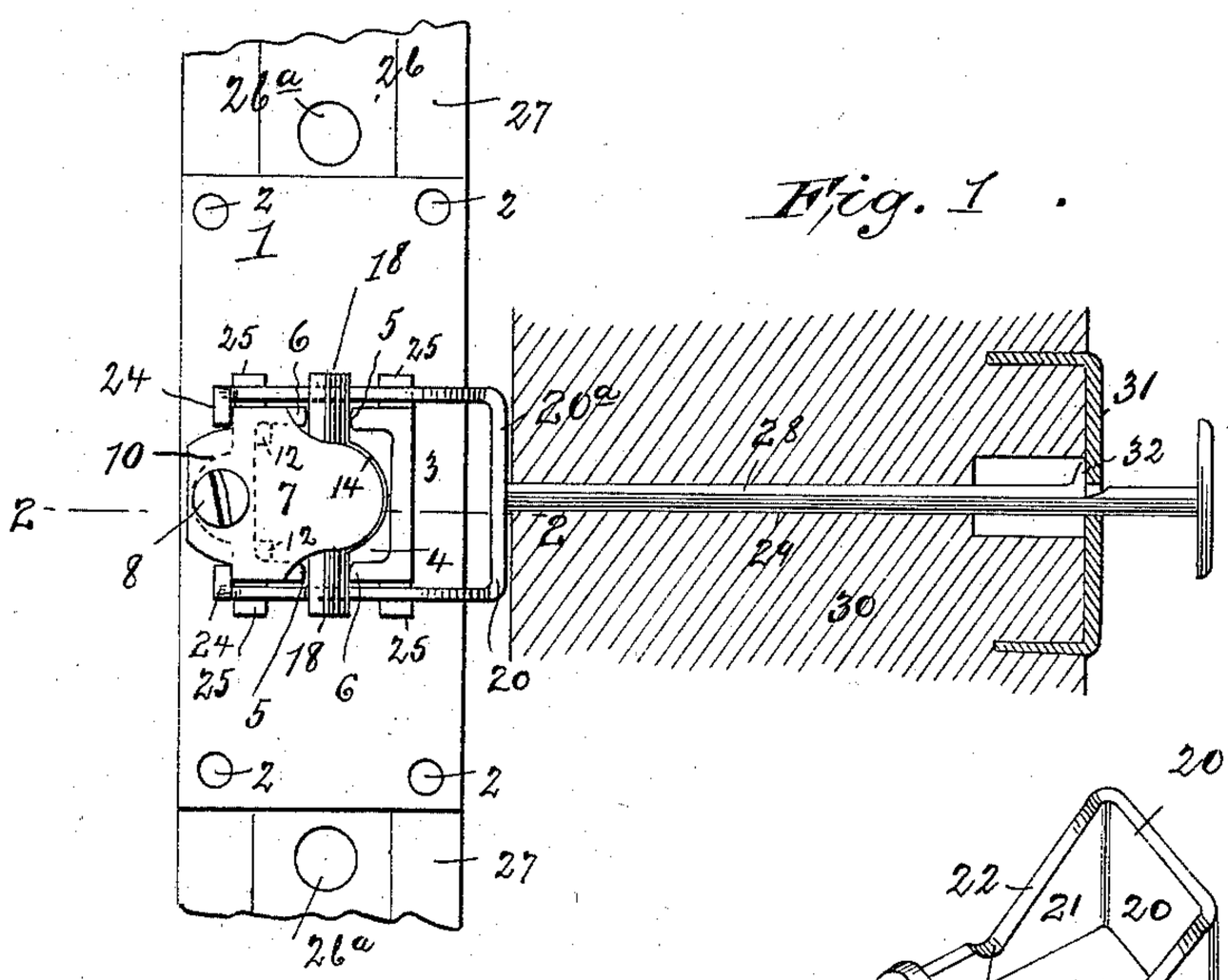

Fig. 1.

Fig. 3.

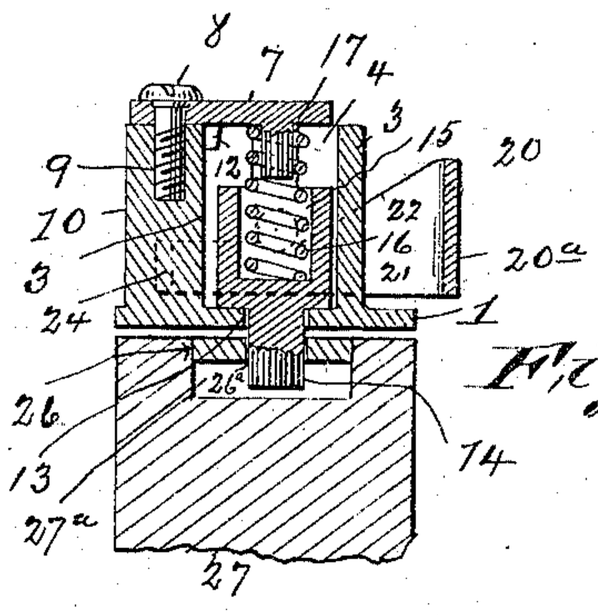

Fig. 2.

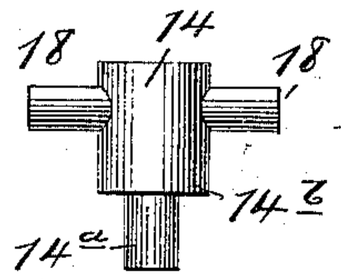

Fig. 4.

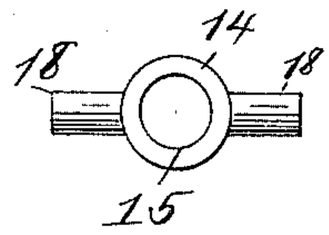

Fig. 5.

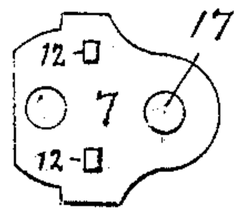

Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

JAMES N. EUWER, OF NEW CASTLE, PENNSYLVANIA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 559,483, dated May 5, 1896.

Application filed January 22, 1894. Serial No. 497,587. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. EUWER, a resident of New Castle, Lawrence county, Pennsylvania, have invented certain new and useful Improvements in Sash and Door Fasteners, of which the following is a specification.

My invention relates to the class of sash and door fasteners shown in my United States Patents No. 477,891, dated June 28, 1892, and No. 499,913, dated June 20, 1893, respectively; and it has for its object to simplify and improve the general construction and arrangement of such fasteners, so as to reduce the cost and increase the utility of the device.

The invention consists in the novel details of improvement and the combination of parts that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a rear elevation of my improved fastener, showing a portion of the window-framing and the escutcheon for the operating-rod in section. Fig. 2 is a cross-section of the fastener and a part of the window-sash, taken on the plane of the line 2 2 in Fig. 1. Fig. 3 is an isometric projection of the inclined bar that operates the bolt of the fastener. Fig. 4 is a detail side view of the bolt. Fig. 5 is an end view thereof, and Fig. 6 is a detail view of the inner side of the cover.

Referring now to the accompanying drawings, in which similar numerals of reference indicate corresponding parts in the several views, the numeral 1 indicates the front or face plate of the fastener, which may be provided with apertures 2 2 to receive screws or the like to secure the fastener to the window-frame, door-frame, or other desired fixture. On the plate 1 is suitably secured a casing 3, having an opening 4 at its outer end, the slots 5 5 on opposite walls 6 6, that lead to the outer edge of the casing, said slots 5 being disposed in parallel lines. The casing 3 is preferably rectangular on its outer sides and is provided with a cap or cover 7, located over the opening 4. The cap or cover 7 is held on the casing 3 by a screw 8, that passes through said cover and enters a threaded recess 9 in the casing 3. Said casing is preferably provided with an enlarged portion 10 on one side, in which said screw works. The cap or cover 7 is provided with one or more lugs 12, that fit in against the inner side of a wall of the casing 3, the screw 8 preferably entering the same wall of the casing. Of course the lugs 12 could project from the casing 3 into the cap 7, if preferred. By this means the cap 7 can be made quite small and of the desired contour, and the face-plate 1 and the casing 3 may be cast in one piece of metal to produce a strong structure of light weight.

The plate 1 is provided with an aperture 13 in line with the opening 4 in the casing 3 to permit the passage of a bolt.

14 is a bolt that is located in the opening 4 of casing 3, the outer portion of the bolt passing through the opening 13 in plate 1. (See Fig. 2.) The opposite end of the bolt 14 has a cavity 15, within which lies a coiled spring 16, that bears at one end against the bottom of said cavity, and at its opposite end said spring bears against the cap or cover 7. (See Fig. 2.)

The cap or cover 7 carries a pin or projection 17, that enters the spring 16 to guide it in position for proper action. The bolt 14 is shown in tubular form, having its end 14^a reduced in size to pass through opening 13 in plate 1, a shoulder 14^b being thereby formed that bears against the plate 1 and limits the outward movement of said bolt by the spring 16. (See Fig. 4.) The bolt 14 is provided with oppositely-extending studs or projections 18, that pass through the slots 5 of casing 3, said studs projecting from the opposite sides of said casing, as in Fig. 1, and being adapted to slide therein.

20 is a bolt-operating bar or slide that is adapted to act on the studs 18 to retract the bolt 14 from the opening 13 in plate 1. The bar or slide 20 is forked or has two projecting sides 21, each of which sides 21 is inclined downwardly and forwardly at 22, as clearly shown in Fig. 3. At the lower forward ends of the incline 22 the sides 21 are recessed or hollowed at 23, in which recesses the studs 18 normally rest. (See Fig. 2.) The sides 21 of the bar or slide 20 pass along opposite sides of the casing 3, said slide thereby embracing said casing, so that the inclines 22 can act on the studs 18 at the same time. At the outer ends of the sides 21 of the slide 20 lugs 24 are formed, that extend inwardly and engage the

casing 3 to prevent detachment of the slide from said casing and to limit the rearward movement of said slide.

The bar or slide 20, conformed as above specified, is preferably made from a single piece of metal, which is first stamped to produce the inclines 22, recesses 23, and lugs 24, and then bent to form the cross-bar 20^a, parallel sides 21, and inwardly-turned lugs. When the bar or slide 20 is pressed toward the casing, the inclines 22 ride under the studs 18 and retract the bolt against the stress of the spring 16, and when said bar 20 is released the spring 16 forces the bolt forward again, causing the studs 18 to act on the inclines 22 to return the bar or slide 20 to its normal position. (Shown in Fig. 1.)

By having studs 18 projecting from opposite sides of the bolt 14 and two parallel inclines 22 the bolt will be evenly moved at all points, and therefore its sides need not be positively guided by the walls of the casing 3, but can be left free, as shown, whereby friction on the parts is reduced and ease of operation is increased.

The under edges of the sides 21 of the bar or slide 20 are straight and may have a bearing against the plate 1 or against lugs 25 thereon, which will reduce friction on the slide.

The fastener above described is to be placed in a recess in the window or door frame, as described in the patents hereinabove mentioned, and the bolt 14 is to engage an apertured strip 26, placed on the side edge of the window-sash 27, all as clearly described in said patents, to which reference is hereby made for a more detailed description of the manner of applying the device.

The bar or slide 20 is to be operated to retract the bolt 14 by a rod 28, that passes through an aperture 29 in the window or door casing or framework 30, said rod 28 also passing through an apertured plate or escutcheon 31, located on the outside of the framework 30. The rod 28 has a side projection 32, arranged to engage the plate or escutcheon 31, to prevent the spontaneous detachment of said rod, said plate or escutcheon having a suitable opening to permit the insertion and removal of said projection with the rod, and so arranged that when said rod is turned partly around said projection will be out of line with said opening. Said escutcheon has prongs 33 to hold it on the framework. Said rod and escutcheon may be arranged substantially as shown in the above-mentioned patents; but the particular arrangement of said rod or escutcheon herein shown I intend to claim in a subsequent application. By pressing on the rod 28 the slide 20 will be pushed forward (as the rod 28 abuts against the cross-bar 20^a) to cause the inclines 22 22 to retract the bolt 14, and when the rod is released the spring 16 will force the bolt 14 back, and thus return the slide 20 and rod 28 to their normal positions. By having a series of apertures 26^a in strip 26 to receive the bolt 14 the sash may be held at the desired height, the sash 27 having a groove 27^a behind said strip to permit the passage of said bolt. (See Fig. 2.)

The device is simple in construction, cheap to manufacture, and effective in operation, and by its use the windows can be securely locked at any desired height.

The device is practically burglar-proof, as the fastener is securely embedded in the framework, and when the rod 28 is removed it will be difficult for a burglar to insert a rod to operate slide 20, especially when the window is but partly open.

Having now described my invention, what I claim is—

1. The combination of a plate having an aperture, a casing carried by said plate, and having slots which are parallel on opposite sides thereof, and a bolt having studs extending on opposite sides and entering said slots, with a slide having a cross-bar and two parallel sides that pass along opposite sides of the casing, said sides having inclined parts to engage said studs, substantially as described.

2. In a sash or door fastener, a bolt having studs, combined with a slide composed of a bar made from a single piece of metal having cross-bar 20^a, and sides 21, said sides having parallel inclines, substantially as described.

3. In a sash or door fastener the combination of a casing and a bolt therein, said bolt having oppositely-extending studs, with a slide having parallel sides located on opposite sides of said casing, said sides having inclines to engage said studs and lugs on said sides to engage the casing, as and for the purpose specified.

4. The combination of a bolt having studs, with a slide composed of a bar having cross-bar 20^a, and parallel sides, said sides having parallel inclines and recesses 23 to receive said studs, substantially as described.

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