

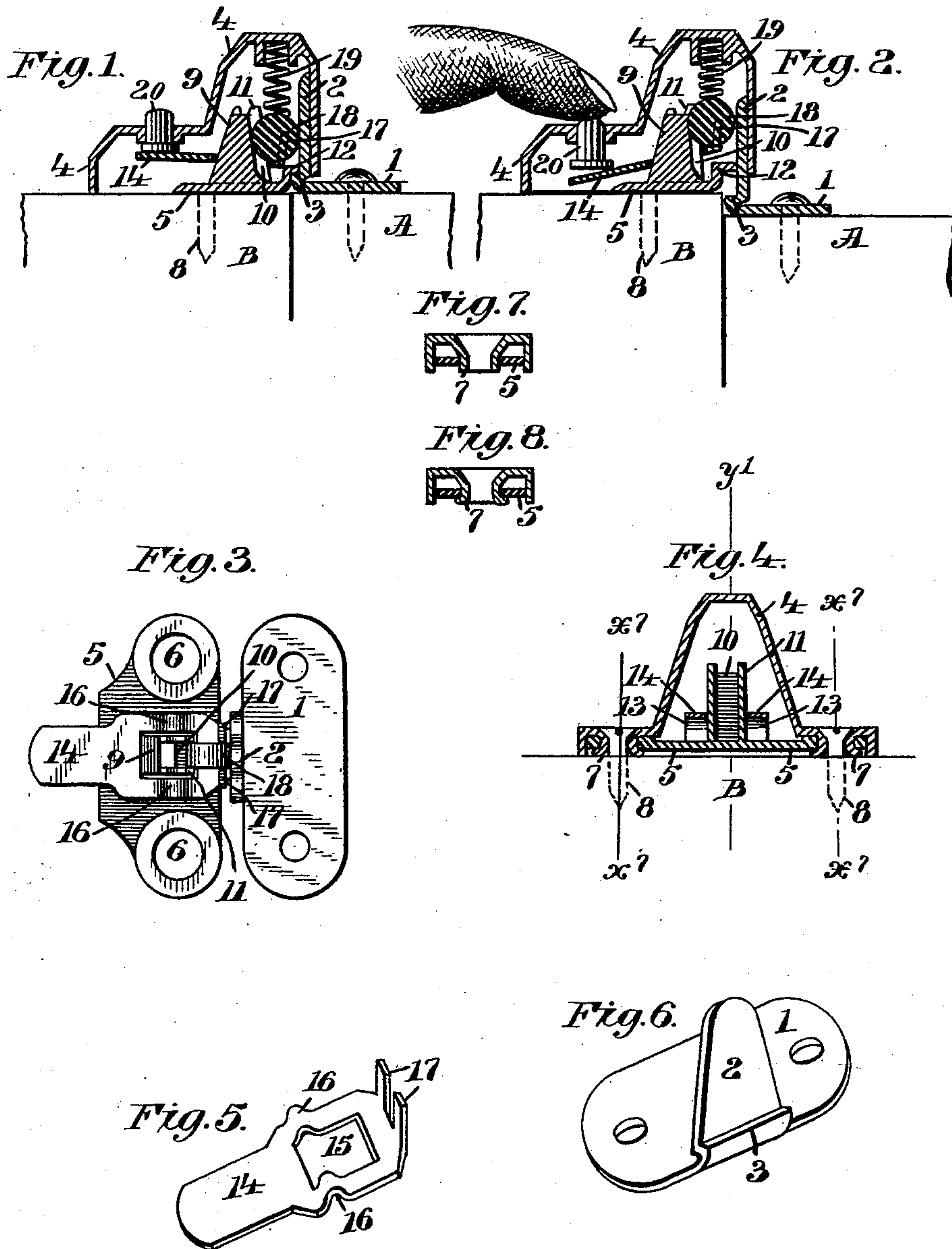
(No Model.)

G. M. GRISWOLD.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 453,339.

Patented June 2, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE M. GRISWOLD, OF NEW HAVEN, CONNECTICUT.

FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 453,339, dated June 2, 1891.

Application filed October 25, 1890. Serial No. 369,357. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. GRISWOLD, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Fasteners for the Meeting-Rails of Sashes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in fasteners for the meeting-rails of sashes, but is more particularly designed as an improvement in the class of locks shown and described in Letters Patent of the United States No. 403,102, granted to me the 14th day of May, 1889.

The object of my present improvement is to furnish a fastener operating upon the same general principle as that exhibited in the Letters Patent aforesaid, and which while of great strength and utility shall be simple and cheap in its construction; and with these ends in view my invention consists in the combination of elements and co-operating parts, hereinafter fully described, and then recited in the claims.

In order that those skilled in the art to which my invention appertains may fully understand the construction and operation of my improved fastener, I will describe the same in detail, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a vertical longitudinal section taken centrally through the fastener at the line y of Fig. 4, the sashes being shown as locked; Fig. 2, a similar view, but showing the sashes as unlocked and the post partially withdrawn; Fig. 3, a plan view with the housing removed; Fig. 4, a section through the housing, certain parts being removed; Fig. 5, a perspective of the operating-lever; Fig. 6, a perspective of the locking-post and its base; Figs. 7 and 8, sections upon the line x' of Fig. 4, the former showing the parts in assembled position, but not secured, and the latter showing said parts as permanently connected.

Like letters and numerals denote the same parts in all the figures of the drawings.

A and B represent, respectively, the upper

and lower sash-rails. Upon the upper surface of the sash-rail A is the post, which forms one element of the complete fastening device. This consists of the base 1, bearing the vertically-projecting portion 2, these parts being preferably made of strong sheet metal drawn and bent into the proper shape. Upon the outside, near the base, the post 2 is provided with a flange 3, whose purpose will be presently explained.

4 is a housing, whose general shape in section appears at Figs. 1 and 4. This housing or shell may be either cast or drawn from sheet metal, as may be found convenient.

5 is a base-plate, which is adapted to fit within the bottom of the housing, as seen at Figs. 1 and 4. At its ends it is provided with perforations 6, which fit over a pair of downwardly-projecting hubs 7, which depend from the ends of the housing, and through which screws 8 are adapted to be driven for the purpose of securing the housing in position upon the sash-rail. The housing and plate are secured together by placing the latter over the hubs, as just recited, and then swaging the ends of said hubs outward after the manner of an eyelet, as appears at Figs. 4 and 8. This, as will be readily seen, does away with the use of any rivets or screws in the construction and assembly of the several parts. At the center of the base-plate is formed integral therewith an upward projection 9, (see Figs. 1, 3, and 4,) whose outer face is inclined, as seen at 10, said incline being provided with raised flanges 11 at either side thereof, as appears from the drawings. In front of the base of this projection is an outwardly-projecting lip 12, extending along the edge of the base-plate, and which is adapted to co-operate with the flange or lip 3 upon the locking-post, for a purpose which will presently appear.

At either side of the projection 9 is formed a small wedge-shaped fulcrum 13, which is preferably cast integral with the base-plate. They are shown in front elevation at Fig. 4.

14 is the operating-lever which has a central opening 15, adapted to slip easily over the part 9, and at either side of said opening said lever is bent, as at 16, to form seats adapted to rest and turn upon the fulcrums just described. The front end of this lever is pro-

vided with a pair of fingers 17, turned upward substantially at right angles.

18 is a cylindric roll, which, when in position, serves as the movable locking element 5 of the fastener.

19 is a spring arranged within the housing and engaging the roll with a downward pressure.

20 is a button, which projects upward 10 through the rear end of the housing and whose lower end engages and is adapted to operate the rear end of the lever 14.

In assembling my improved sash-fastening device the lever is first placed in its position 15 over the central projection, (see Fig. 3,) so that it is balanced upon the fulcrum-point heretofore referred to. The roll 18 is then set in position upon the forward end of the lever between the fingers 17, the periphery of said 20 roll resting against the inclined surface 10 of the projection. When in this position, it is held as against lateral displacement by the fingers on the lever and the flanges 11 at the 25 sides of the inclined surface. When these parts are in this position, the housing, into which spring 19 has been inserted and likewise the button 20, is placed over the base-plate, and the whole secured by expanding the ends of the hubs upon the housing, as 30 shown at Figs. 4 and 8.

In the operation of my invention the two members which form the complete fastener are disposed upon the meeting-rails of the sashes, so that when the latter are in their 35 closed position the post 2 may enter between the front wall of the housing and the periphery of the roll 18. In closing the sashes the post as it enters will in its passage between the housing and the roll lift the latter against 40 the downward pressure of the spring, at the same time pressing it a little upward and backward along its inclined seat. Upon attempting to withdraw the post, however, it will be readily understood that the roll will 45 wedge said post fast against the outside of the housing, in the same manner as the construction shown and described in the Letters Patent heretofore referred to. When the

parts are locked and it is desired to release them, pressure upon the button at the rear of 50 the housing, will tilt the lever on its fulcrum, and thereby raise the roll 18 upward and slightly backward against the thrust of its spring, thereby removing it out of contact with the surface of the post, which may then 55 be withdrawn. The two overlapping flanges or lips 3 and 12, heretofore referred to, are designed to prevent the introduction between the sashes of any thin instrument by means of which the roll might be lifted so as to cease 60 to bind the post.

I claim—

1. In a sash-fastener, the combination, with the base-plate having perforations there- 65 through, of the housing provided with depending hubs adapted to extend through said perforations in the base-plate, said plate and housing adapted to be secured together in assembled position by the expansion of the 70 hubs within said perforations, substantially as described.

2. In a sash-fastener, the combination, with the locking-post, of the complementary por- 75 tion of the fastener, the same consisting of the base-plate bearing the inclined faced projection, the lever arranged astride said projection and fulcrumed at its center, the roll 80 seated upon the lever and adapted to be actuated thereby, and the inclosing housing secured to the base-plate and provided with means for the operation of the lever, substan- 85 tially as described.

3. In a sash-fastener, the combination, with the post, of the base-plate provided with a 85 projection, the lever astride said projection and having a seat for the roll, the inclosing housing secured to the base-plate, and a button projecting through the housing and adapted to operate the rear end of the lever, 90 substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE M. GRISWOLD.

Witnesses:

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